

**STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE
FISH PROGRAM
ESA Response
May 5, 2010**

ESA BULLETIN

**Status of Federal ESA Review and Listing Processes for Washington Fish and
Associated Species**

This bulletin summarizes current activities relative to federal agency ESA status reviews of Washington fish stocks and associated species. The most recent review and ESA decision timelines are updated for each species. Progress on stock conservation initiatives, and compliance with ESA protective provisions, by state, tribal, and federal fish managers are also reported.

Summary of Recent Actions

**I. Federal Agency ESA Review and Listing Activity Progress and Decision
Time Lines**

Bocaccio, Canary Rockfish, Greenstripe Rockfish, Redstripe Rockfish, and Yelloweye Rockfish – *New petition and initiation of 90-day review on 29 October 2007. Candidate species status and status review initiation on 17 March 2008. On 23 April 2009, NMFS proposes bocaccio for “Endangered” species status, canary and yelloweye rockfish for “Threatened” species status, and greenstripe and redstripe rockfish as “not warranted” for ESA listing. On 28 April 2010, bocaccio was listed as “Endangered” and canary & yelloweye rockfish were listed as “Threatened.”*

On 29 October 2007, bocaccio, canary rockfish, greenstripe rockfish, redstripe rockfish, and yelloweye rockfish were [petitioned](#) for ESA “Threatened” or “Endangered” status in Puget Sound, Washington. On 23 April 2009, NOAA National Marine Fisheries (NMFS) proposed bocaccio for “Endangered” species status, canary and yelloweye rockfish for “Threatened” species status, and greenstripe and redstripe rockfish as “not warranted” for ESA listing. On 28 April 2010, bocaccio was ESA listed as “Endangered”; and canary and yelloweye rockfish were ESA listed as “Threatened.” Washington Department of Fish and Wildlife’s (WDFW) Marine Resources Division released the “Puget Sound Rockfish Conservation Plan (PSRCP)” for public review and has a comment period open until 21 May 2010. The finalized version is expected in July 2010. For more information, please contact Greg Bargmann at (360) 902-2825.

Bull Trout – *Five-year status review released on 25 April 2008; USFWS proposes revised critical habitat for bull trout on 14 January 2010.*

On 25 April 2008, U.S. Fish and Wildlife Service (USFWS) released its [five-year status review on bull trout](#). On 14 January 2010, USFWS proposed revised critical habitat designation for bull trout in the conterminous United States ([75 FR 2270](#)). For more information, please contact Jim Uehara at (360) 902-2738.

Coastal Cutthroat Trout – SW Washington/LCR DPS – USFWS proposed coastal cutthroat trout (SW Washington/LCR DPS) for “Threatened” status on 5 April 1999; USFWS withdraws the ESA listing proposal on 5 July 2002; USFWS sued by the Center for Biological Diversity over the withdrawn ESA listing rule on 3 February 2005; US Court of Appeals for the Ninth Circuit affirms the lawsuit in part, reverses and remands in part – filed on 18 April 2008; After further review, USFWS withdraws ESA listing proposal on 25 February 2010.

On 5 April 1999, USFWS proposed listing the southwest Washington/lower Columbia River (LCR) DPS of coastal cutthroat trout as “Threatened”, but withdrew the proposed rule on 5 July 2002. In 2005, the Center for Biological Diversity (CBD) sued USFWS at US District Court/Oregon and lost. On 5 March 2008, the US Court of Appeals for the Ninth District affirmed part (1) but reversed and remanded part (2) in the ruling filed on 18 April 2008 ([Case No. 06-35080](#)). On 24 March 2009, USFWS [proposed listing](#) the SW Washington/LCR DPS of coastal cutthroat trout and opened a 30 day comment period requesting data on the estuarine and marine habitats for this DPS. On 25 February 2010, USFWS withdraws the proposed rule for listing SW Washington/LCR DPS of coastal cutthroat trout citing “that the threats to coastal cutthroat trout in the marine and estuarine areas of its range within the DPS... are not likely to endanger the species now or in the foreseeable future throughout this portion of its range.” For more information on cutthroat trout, please contact Jim Uehara at (360) 902-2738.

Coho Salmon – Puget Sound ESU – Petition sent to NMFS for ESA listing as threatened in early March 2010; 90-day decision expected by early June 2010.

In early March 2010, Sam Wright petitioned NMFS to federally list the Puget Sound ESU of coho salmon as threatened. NMFS has 90 days to determine whether or not the petition presents substantial scientific and commercial information indicating that the petitioned action may be warranted.

Endangered Species Act (ESA) – Reformatting of ESA list: *Proposed rule released 5 August 2008 and comment period ended 4 September 2008. Section 7 modifications: Proposed rule released 15 August 2008 and the comment period ended 14 October 2008; draft EA published 27 October 2008 and the comment period ended 6 November 2008. Final rule was published on 16 December 2008. Another final rule was published on 5 May 2009 returning the ESA regulations to their previous status.*

On 5 August 2008, USFWS [proposed reformatting the Lists of Endangered and Threatened Wildlife and Plants](#) for added clarity by correcting anomalies, ambiguous entries, and confusing formats; updating / correcting historic ranges and footnotes; and reordering, adding, removing, and redefining column headings. This rule is still only proposed.

On 15 August 2008, a [proposed rule](#) was published to modify Section 7 of the ESA. On 16 December 2008, the [final rule](#) was published effective 15 January 2009. On 5 May 2009, a [final rule](#) returns ESA regulations that were in effect immediately before the effective date of the regulation issued on December 16, 2008.

Eulachon – southern DPS – New petition and initiation of 90-day review on 8 November 2007. Candidate species status and status review initiation on 12 March 2008. Status review published on 15 December 2008. “Threatened” listing for southern DPS of eulachon proposed on 13 March 2009. On 18 March 2010, the southern DPS of eulachon were listed as “Threatened” effective 17 May 2010.

On 8 November 2007, Eulachon were petitioned for ESA “Threatened” or “Endangered” status in Washington, Oregon, and California. On 12 March 2008, NMFS determined that substantial scientific and commercial information exists indicating that the [petitioned action may be warranted](#) and initiated a

status review. The status review, released on 15 December 2008, described the eulachon population for the conterminous US and southern British Columbia (south of Naas River, BC to Mad River, CA) as the southern DPS. On 13 March 2009, the southern DPS of eulachon was proposed as a “Threatened” species. On 18 March 2010, NMFS [listed](#) the southern DPS of eulachon as a “Threatened” species. An updated eulachon [status review](#) was released at the time of the listing. For more information, please contact Greg Bargmann at (360) 902-2825.

Green Sturgeon – southern DPS – Southern DPS federally ESA listed as “Threatened” on 6 April 2005; Critical habitat is proposed on 8 September 2008. NMFS proposes take prohibitions 4(d) rule on 21 May 2009. On 9 October 2009, NMFS designated critical habitat for the southern DPS of green sturgeon. On 12 November 2009, NMFS announces its intent to prepare a recovery plan.

On 6 April 2006, the southern DPS of green sturgeon was ESA listed as “Threatened.” On 17 April 2007, the Center for Biological Diversity filed a 60-day notice of intent to sue the Secretary of Commerce for failing to designate critical habitat and establish protective 4(d) take restrictions. On 8 September 2008, NMFS [proposed](#) a rule that would establish critical habitat for the southern DPS of green sturgeon; and on 9 October 2009, NMFS [finalized](#) that rule. On 21 May 2009, NMFS [proposed](#) 4(d) take restrictions for green sturgeon; and the final rule is expected during summer 2010. On 12 November 2009, NMFS [announced](#) its intent to prepare a Recovery Plan for the southern DPS of green sturgeon. For more information, please contact Olaf Langness at (360) 906-6741.

Kokanee (Lake Sammamish population/DPS) – New petition and initiation of 90-day finding on 9 July 2007; emergency listing not warranted and 90-day finding reinitiated on 23 October 2007; candidate species status and status review initiation on 6 May 2008.

On 9 July 2007, USFWS was petitioned to ESA list the Lake Sammamish Kokanee. Emergency listing was concluded to be “not warranted” (24 September 2007). A 90-day finding was then initiated (23 October 2007) and completed (6 May 2008) with the finding of [substantial information indicating that ESA listing may be warranted](#) and a status review would be initiated. For more information, please contact Jim Uehara at (360) 902-2738.

Salmon – Initiation of 5-year status review of west coast salmon and steelhead – NMFS initiates status review of 16 ESUs and 11 DPS of Pacific salmon and steelhead on 18 March 2010.

WDFW will be submitting requested information to NMFS by the 17 May 2010 deadline. For more information, please contact Jon Anderson at (360) 902-2711.

II. Summary of Federal ESA Review Plans

Fishery Management and Evaluation Plans (FMEPs)

Fishery Management and Evaluation Plans (FMEP) present a mechanism, addressed in the [final 4\(d\) rules](#), for the take of certain federally listed species. The primary goal of FMEPs is to devise biologically-based fishery management strategies that ensure the conservation and recovery of listed ESUs and DPSs. There is one active FMEP in Washington State with three FMEPs pending approval from NMFS. For more information, please contact Mitch Dennis at (360) 902-2654.

Lower Columbia River FMEP – Approved

WDFW submitted the [Lower Columbia River FMEP](#) to NMFS on 6 March 2001, and it was approved by NMFS on 29 December 2003. This FMEP addresses fisheries impacts upon the LCR ESU of Chinook

salmon, LCR DPS of steelhead, and Columbia River ESU of chum salmon. All three are listed on Endangered Species List as “Threatened.”

Lower Columbia River FMEP – Coho Supplement – Pending

With the ESA listing of the LCR ESU of coho salmon as “Threatened” on 28 June 2005, WDFW submitted a [supplemental FMEP to cover LCR ESU of coho salmon](#) on 13 September 2005. NMFS is performing some further analyses and is hoping for approval during 2010.

Middle Columbia River FMEP – Pending

WDFW submitted the [Middle Columbia River FMEP](#) to NMFS on 21 September 2001. The FMEP was updated and resubmitted to NMFS in June 2003 and April 2007; and is currently pending final approval from NMFS, which is expected in late 2010. This FMEP covers fishery impacts upon the Middle Columbia River DPS of steelhead, LCR ESU of Chinook salmon, and LCR DPS of coho salmon; all of which are ESA listed as “Threatened.”

Snake River FMEP – Pending

WDFW submitted the [Snake River FMEP](#) to NMFS on 22 May 2001 defining future management of the recreational fisheries in the Snake River watershed and providing protective regulations for the “Threatened” Snake River DPS of steelhead. In 2008, NMFS commented on the Snake River FMEP and requested changes and updates from WDFW. The Snake River FMEP seeking coverage for Snake River Basin DPS of steelhead was formally submitted to NMFS on 26 August 2009. On 2 April 2010, NMFS opened a 30-day comment period for the Snake River FMEP ([75 FR 16738](#)).

Hatchery and Genetic Management Plans (HGMPs)

Hatchery and Genetic Management Plans (HGMPs) are mechanisms for addressing “take” of ESA-listed species that may occur resulting from artificial propagation activities. The primary goal of HGMPs is to devise biologically-based artificial propagation management strategies to ensure ESA-listed salmonid conservation and recovery. Currently, WDFW has [175 HGMPs](#) written for WDFW hatchery programs and submitted to NMFS; and approval from NMFS is expected by late 2010.

On 4 March 2002, [seven HGMPs](#), developed by WDFW, were approved by NMFS for the Hood Canal summer-run ESU of chum salmon recovery. The plan outlined a way to help the ESU recover. First, hatcheries are to be used for supplementing and maintaining summer-run chum salmon populations through artificial production. Second, freshwater and estuarine habitat conditions are to be improved, providing natural spawning grounds for a sustainable wild population. These HGMPs are set to expire after three summer-run chum salmon generations (12 years) from the inception year of each hatchery.

In negotiations to settle lawsuits with Washington Trout and Native Fish Society, WDFW developed the remaining 168 HGMPs, released them for public comment, and submitted them to NMFS. The lawsuit was brought forth to protect the wild salmonid runs from hatchery produced salmonids. Currently, NMFS is evaluating the HGMPs for ESA and NEPA compliance and expecting to release a draft EIS with alternatives. After public review and comments, the final EIS is expected from NMFS during 2010.

Recovery Plans

The Endangered Species Act requires NMFS and USFWS to develop and implement recovery plans for threatened and endangered species [Section 4(f)]. [Recovery Plans](#) minimally incorporate (1) a description of site-specific management actions necessary to achieve species recovery; (2) objective, measurable criteria which, when met, would result in species removal from the list; and (3) time and cost estimates required to achieve the plan’s goal. Table 1 lists the six salmonid recovery plans in various stages of development.

Table 1. Salmonid Recovery Plans in Washington State.

Species	Status	As of	Notes
Hood Canal summer-run ESU of Chum Salmon	Adopted	24 May 07	
Lake Ozette ESU of Sockeye Salmon	Adopted	29 May 09	
Middle Columbia River (MCR) DPS of Steelhead	Adopted	30 Sept 09	
Puget Sound ESU of Chinook Salmon	Adopted	19 Jan 07	
Snake River (SR) ESU of Sockeye Salmon; SR Spring/Summer run ESU & SR Fall ESU of Chinook Salmon; MCR DPS of Steelhead, and SR DPS of Steelhead	Draft	14 Mar 06	Covers five species, three states, and multiple land owners & uses.
Upper Columbia River (UCR) ESU of Chinook Salmon & UCR DPS of Steelhead	Adopted	9 Oct 07	

Resource Management Plans (RMP)

Resource Management Plans (RMP) are a mechanism for applying 4(d) rule limit 4 (fishery activities) and limit 5 (artificial propagation) activities. Joint RMPs are developed jointly among the tribes and states under the jurisdiction of *U.S. v. Oregon*. The court case addressed equitable sharing of fish harvest amongst the tribes and the states. Before a RMP can be approved, the Secretary of Commerce must take into account public comments and determine if the RMP will not reduce the likelihood of the listed species' survival and recovery.

Hood Canal Summer-run ESU of Chum Salmon RMP

On 27 April 2001, NMFS determined that the [Hood Canal Summer-run ESU of Chum Salmon RMP](#) provided by WDFW and the Point-No-Point Treaty Tribes would not appreciably reduce the likelihood of Hood Canal summer-run ESU of chum salmon survival or recovery ([66 FR 31600](#)). The RMP's goal is to "...protect, restore and enhance the productivity, production and diversity of Hood Canal summer-run chum salmon and their ecosystem to provide surplus production sufficient to allow future directed and incidental harvest of summer-run chum salmon." The RMP is to have annual reports submitted by May 31st and a more comprehensive plan review every five years. This information will be used by NMFS and the co-managers to assess fish impacts and revise the RMP as necessary. For more information, please contact Susan Bishop (NMFS) at (206) 526-4587.

Lake Ozette ESU of Sockeye Salmon RMP

On 17 July 2003, NMFS determined that the [Lake Ozette ESU of Sockeye Salmon RMP](#) provided by WDFW and the Makah Tribe would not appreciably reduce the likelihood of Ozette Lake ESU of sockeye salmon survival or recovery ([69 FR 18874](#)). The RMP proposes Ozette Lake ESU of sockeye salmon artificial propagation, research, monitoring, and evaluation activity goals for the Ozette Lake Basin. If the goal of self-sustaining sockeye salmon runs meeting escapement goals are met, then the RMP will conclude after 12 years (three sockeye salmon generations). For more information, please contact Tim Tynan (NMFS) at (360) 753-9579.

Puget Sound ESU of Chinook Salmon RMP – Submitted to NMFS

On 28 February 2005, NMFS determined that the [Puget Sound ESU of Chinook Salmon RMP](#) provided by WDFW and the Puget Sound Treaty Tribes would not appreciably reduce the likelihood of Puget Sound ESU of Chinook salmon survival or recovery ([70 FR 12194](#)). That RMP divided the 23 Chinook salmon populations into 15 management units and creates the framework for jointly managing all salmon and gillnet steelhead fisheries that may impact the ESA-listed Puget Sound ESU of Chinook salmon, and expired in 2010. Consequently, WDFW has submitted a new Puget Sound ESU of Chinook Salmon RMP

to NMFS and is currently working out the finer details. WDFW is expecting to have this five year plan in place by fall 2010. For more information, please contact Pat Pattillo at (360) 902-2705.

Puget Sound DPS of Steelhead RMP – Submitted to NMFS

On 11 June 2007, NMFS listed the Puget Sound DPS of steelhead as “Threatened.” On 25 September 2008, NMFS [approved 4\(d\) take restrictions](#) for the Puget Sound DPS of steelhead. An initial joint resource management plan [later renamed to Harvest Management Plan (HMP)] between WDFW and Puget Sound Indian Tribes (PSIT) was submitted to NMFS on 14 November 2008. After feedback from NMFS on the November 2008 submission, WDFW and PSIT resubmitted the HMP to NMFS on 7 January 2010 which was returned for further changes. The NEPA approval process is expected to take 20 months with an expected approval by September 2011. For more information, contact Bob Leland at (360) 902-2817.

III. Scientific and Monitoring Permits

4(d) Scientific Research and Monitoring Permits

The majority of WDFW research and monitoring of ESA listed salmonid species, have coverage under 4(d) Scientific Research and Monitoring permits. 4(d) permits only cover research and monitoring of federally threatened species and are issued annually for each calendar year. Take of federally endangered species, use of boat electrofishing, and planned rescue or salvage operations preclude the use of a 4(d) permit. For 2010, fifty-six 4(d) permits were issued for Washington state ([Figure 1](#); [Tables 4 and 5](#)). In NE Washington state, Section 10 permits predominate due to the presence of the federally “Endangered” Upper Columbia River spring-run Chinook salmon and the abundance of hydroelectric dams. For more information, please contact Mitch Dennis at (360) 902-2654.

Section 6 Permit

In 1995, WDFW entered into a cooperative agreement with the USFWS for endangered and threatened fish and wildlife in Washington State. With the cooperative agreement in place, WDFW applied to USFWS (28 August 1998) for direct Columbia River DPS of bull trout take authorization in association with state-managed fish research, stock assessment, and artificial propagation activities directed at bull trout and other salmonid species in the Columbia River basin. In July 2000, WDFW applied for similar take authorization for the Puget Sound/Washington Coast DPS of bull trout. The Section 6 Cooperative agreement is renewed annually. In 2010, the agreement was renewed including both Columbia Basin pygmy rabbit and bull trout. Bull trout take is authorized for salmonid hatchery broodstocking, hatchery monitoring and evaluation activities, and conservation activities for other fish species. For more information, please contact Mitch Dennis at (360) 902-2654.

Section 10 Permits

Currently, there are eleven active Section 10 permits issued solely or jointly to WDFW ([Table 6](#)). Section 10 permits are required whenever there is any take of federally endangered species, use of boat electrofishing, or major funding provided by Bonneville Power Administration (BPA). Section 10 permits last anywhere from a few years to ten years.

Permits - Active:

Permit # 1114

Permit #1114 studies and monitors Rock Island Dam smolt and gas bubble trauma. The goal is to better understand the effects from mid- and upper Columbia River water allocation upon listed salmonids. Rock Island Dam is on the Columbia River, approximately 12 miles downstream from the town of Wenatchee.

WDFW captures juvenile Upper Columbia River (UCR) spring-run ESU of Chinook salmon (E) and UCR DPS of steelhead (T) as part of a long-term, ongoing smolt monitoring program. During handling, smolt are PIT tagged and/or examined for gas bubble trauma. With the PIT tag data, managers and researchers are better able to develop a basin-wide PIT tagged salmonid database and understand smolt migration timing and behavior in the Columbia River system. This permit expires on 31 August 2012. For more information, please contact Mike Tonseth at 509-663-9678.

Permit # 1196

[Permit #1196](#) allows for the take of UCR spring-run ESU of Chinook salmon (E) and UCR DPS of steelhead (T) for the hatchery programs supplementing the Wenatchee and Methow River populations. The Rock Island Fish Hatchery complex is funded by the Chelan County Public Utility District (PUD) #1, and the Methow Fish Hatchery complex is funded by the Douglas County PUD #1. PUD funding is mitigation for impacts from hydropower dams. The program's goal is supplementation of naturally spawning populations of these two species in these two watersheds. This permit expires on 20 January 2014. For more information, please contact Mike Tonseth at 509-663-9678.

Permit # 1345

Permit #1345 now has three components. Study #1 allows for the use of boat electrofishing as a statewide fish sampling method on warmwater fish and its incidental take of listed salmonids. Boat electrofishing is a sampling method not covered by 4(d) permits. Study #2 allows use of electrofishing for researching species preying upon listed juvenile Cedar River Chinook salmon (part of the Lake Washington basin). Study #3 (modification approved 10 June 2009) permits boat electrofishing and tangle nets for research in the mid-Columbia River. This permit expires on 31 December 2011. For more information, please contact Mitch Dennis at (360) 902-2654.

Permit # 1347

[Permit #1347](#) authorizes incidental take of UCR spring-run ESU of Chinook salmon (E) and UCR DPS of steelhead (T) during the implementation of non-ESA listed salmon artificial propagation facilities in the upper Columbia River basin. This permit is held jointly with Chelan County PUD #1 and Douglas County PUD #1. The artificial propagation programs are to mitigate for losses due to hydroelectric dam construction and operation. This permit expires on 22 October 2013. For more information, please contact Mike Tonseth at 509-663-9678.

Permit # 1395

[Permit #1395](#) authorizes annual take of UCR spring-run ESU of Chinook salmon (E) and UCR DPS of steelhead (T) associated with the implementation of UCR DPS of steelhead artificial propagation enhancement facilities in the upper Columbia River basin. This permit is held jointly with Chelan County PUD #1 and Douglas County PUD #1. The artificial propagation programs intend to supplement naturally occurring UCR DPS steelhead populations upstream of Priest Rapids Dam (mainstem Columbia River) including the Wenatchee, Methow, and Okanogan Rivers and their tributaries. This permit expires on 2 October 2013. For more information, please contact Mike Tonseth at 509-663-9678.

Permit # 1530

[Permit #1530](#) authorizes the direct take of ESA listed salmonids associated with the operation of the Lower Granite Dam fish trap on the Snake River. Snake River (SR) fall-run ESU of Chinook salmon, SR spring/summer-run ESU of Chinook salmon, and SR DPS of steelhead will be taken for research, removal of hatchery born, and/or broodstock for artificial propagation facilities. This permit is held jointly amongst WDFW, Idaho Fish & Game, and the Nez Perce tribe (through Bureau of Indian Affairs). This permit expires on 31 December 2010. For more information, please contact Mark Schuck at (509) 382-1004.

Permit # 1554

[Permit #1554](#) allows for incidental take of UCR spring-run ESU of Chinook salmon (E), UCR DPS of steelhead (T), Middle Columbia River (MCR) DPS of steelhead (T), and SR fall-run ESU of Chinook salmon (T) for Washington state’s recreational fisheries program. This permit covers the waters of the Middle and Upper Columbia River including all of its tributaries. This permit expires on 20 June 2018. For more information, please contact Mike Tonseth at 509-663-9678.

Permit # 1592

[Permit #1592](#) authorizes the annual take of UCR spring-run ESU of Chinook salmon (E) and UCR DPS of steelhead (T) associated with the artificial propagation program for the White River spawning aggregate of the Wenatchee population of UCR spring-run ESU of Chinook salmon. This permit is held jointly among WDFW, Grant Count PUD #2, and the Confederated Tribes and Bands of the Yakama Nation. This permit expires on 31 May 2010. For more information, please contact Mike Tonseth at 509-663-9678.

Permit # 13537

Permit #13537 allows for the construction of an in-stream weir in the Lower Grays River to complement existing adult salmonid monitoring efforts. Grays River populations of LCR fall-run ESU of Chinook salmon (T), Columbia River ESU of chum salmon (T), and LCR ESU of coho salmon (T) are all expected to be captured. Chinook salmon hatchery strays will be removed at the weir to promote natural production of the Tule fall Chinook salmon population. This permit expires on 31 December 2017. For more information, please contact Bryce Glaser at (360) 906-6765.

Permit # 14433

Permit #14433 allows for the continued operation and maintenance of the Sunset Falls Trap and Haul Fishway to allow South Fork Skykomish Chinook Salmon (T) and Steelhead (T) populations to spawn naturally in habitat upstream on the falls. This permit expires on June 22, 2019. For more information contact Tom Burns at (360) 902-2558.

IV. Washington Conservation Activities by Species

SALMONIDS (SALMON, TROUT, AND WHITING FAMILY)

Along the West Coast of the conterminous US, there are five salmon species (37 ESUs), steelhead (15 DPSs), bull trout (5 DPSs), kokanee, and several trout species. This adds up to five “Endangered” DPSs/ESUs, twenty-four “Threatened” DPSs/ESUs, and three “species of concern” DPSs/ESUs. Salmonids are short-lived fish with some being anadromous (salmon, steelhead, bull trout) and some residents never leaving fresh water (rainbow trout, kokanee). In the Pacific Northwest, salmon have been vital ecologically (large predictable biomass influx), culturally (Native Americans), and for human perseverance (important food supply). In Washington, there are 17 DPSs/ESUs currently listed on the Endangered Species List: [bull trout](#) [Coastal/Puget Sound (T) and Columbia River (T)], [Chinook salmon](#) [Lower Columbia River (T), Puget Sound (T), Snake River fall-run (T), Snake River spring/summer-run (T), and Upper Columbia River (E)], [coho salmon](#) [Lower Columbia River (T)], [chum salmon](#) [Columbia River (T) and Hood Canal summer-run (T)], [pink salmon](#) [not warranted], [sockeye salmon](#) [Ozette Lake (T), Snake River (E)], and [steelhead](#) [Lower Columbia River (T), Middle Columbia River (T), Puget Sound (T), Snake River Basin (T), and Upper Columbia River (T)] ([Table 3](#)).

SALMON (CHINOOK, CHUM, COHO, PINK, AND SOCKEYE) AND STEELHEAD

Published NMFS Technical Memorandums (1990 to current):

- ❖ August 1990 – NMFS releases “Status and Future of Spring Chinook Salmon in the Columbia River Basin—Conservation and Enhancement” ([NOAA Technical Memorandum NMFS-F/NWC-187](#)).
- ❖ March 1991 – NMFS releases “Definition of "Species" Under the Endangered Species Act: Application to Pacific Salmon” ([NOAA Technical Memorandum NMFS F/NWC-194](#)).
- ❖ April 1991 – NMFS releases “Status Review for Snake River Sockeye Salmon” ([NOAA Technical Memorandum NMFS-F/NWC 195](#)).
- ❖ June 1991 – NMFS releases “Status Review for Snake River Spring and Summer Chinook Salmon” ([NOAA Technical Memorandum NMFS F/NWC-200](#)). The Biological Research Team (BRT) determines that the Snake River spring-run and summer-run ESUs of Chinook salmon still exists, but “are likely to become endangered in the near future if corrective measures are not taken.”
- ❖ June 1991 – NMFS releases “Status Review for Snake River Fall Chinook Salmon” ([NOAA Technical Memorandum NMFS F/NWC-201](#)). The Biological Research Team (BRT) determines that the Snake River fall-run ESU of Chinook salmon still exists, but faces “a substantial risk of extinction if factors affecting the population remain unchanged.”
- ❖ June 1991 – NMFS releases “Status Review for Lower Columbia River Coho Salmon” ([NOAA Technical Memorandum NMFS F/NWC-202](#)). The NMFS Northwest Region Biological Review Team failed to document an existing coho salmon ESU in the Lower Columbia River due to the lack of documented fishery management actions and published research studies.
- ❖ October 1992 – NMFS releases “Pacific Salmon and Artificial Propagation under the Endangered Species Act” ([NOAA Technical Memorandum NMFS-NWFSC-2](#)).
- ❖ April 1993 – NMFS releases “Contaminant Exposure and Associated Biological Effects in Juvenile Chinook Salmon (*Oncorhynchus tshawytscha*) from Urban and Nonurban Estuaries of Puget Sound” ([NOAA Technical Memorandum NMFS-NWFSC-8](#)).
- ❖ May 1993 – NMFS releases “Effectiveness of Predator Removal for Protecting Juvenile Fall Chinook Salmon Released from Bonneville Hatchery, 1991” ([NOAA Technical Memorandum NMFS-NWFSC-9](#)).
- ❖ November 1994 – NMFS releases “Application of DNA Technology to the Management of Pacific Salmon” ([NOAA Technical Memorandum NMFS-NWFSC-17](#)).
- ❖ July 1995 – “Status Review of Mid-Columbia River Summer Chinook Salmon” ([NOAA Technical Memorandum NMFS-NWFSC-22](#)) is released by NMFS. NMFS concludes that the summer-run is part of a larger ESU that includes fall-run and “that at the present time this larger ESU is not likely to become endangered in the foreseeable future and does not warrant listing as a threatened or endangered species.”
- ❖ September 1995 – NMFS releases “Status Review of Coho Salmon from Washington, Oregon, and California” ([NOAA Technical Memorandum NMFS-NWFSC-24](#)).
- ❖ February 1996 – NMFS releases “Status Review of Pink Salmon in Washington, Oregon, and California” ([NOAA Technical Memorandum NMFS-NWFSC-25](#)). The status review states that pink salmon “even-year” and “odd-year” ESUs are not threatened by extinction. Some concern was expressed for “even-year” pink salmon due to their low abundance and population isolation.
- ❖ August 1996 – NMFS releases “Status Review of West Coast Steelhead from Washington, Idaho, Oregon, and California” ([NOAA Technical Memorandum NMFS-NWFSC-27](#)).
- ❖ March 1997 – NMFS releases “Impacts of California Sea Lions and Pacific Harbor Seals on Salmonids and on the Coastal Ecosystems of Washington, Oregon, and California” ([NOAA Technical Memorandum NMFS-NWFSC-28](#)).

- ❖ April 1997 – NMFS releases “Estuarine and Ocean Survival of Northeastern Pacific Salmon – Proceedings of the Workshop March 20-22, 1996 Newport, Oregon” ([NOAA Technical Memorandum NMFS-NWFSC-29](#)).
- ❖ May 1997 – NMFS releases “Genetic Effects of Straying of Non-Native Hatchery Fish into Natural Populations - Proceedings of the Workshop June 1-2, 1995 Seattle, Washington” ([NOAA Technical Memorandum NMFS-NWFSC-30](#)).
- ❖ December 1997 – NMFS publishes “Status Review of Chum Salmon from Washington, Oregon, and California” ([NOAA Technical Memorandum NMFS-NWFSC-32](#)).
- ❖ December 1997 – NMFS releases “Status Review of Sockeye Salmon from Washington and Oregon” ([NOAA Technical Memorandum NMFS-NWFSC-33](#)).
- ❖ February 1998 – “Status Review of Chinook Salmon from Washington, Idaho, Oregon, and California” ([NOAA Technical Memorandum NMFS-NWFSC-35](#)) is released. NMFS determines the existence of 15 Chinook salmon ESUs through genetic and tagging data and determines their extinction risk.
- ❖ July 1999 – NMFS releases “A Conceptual Framework for Conservation Hatchery Strategies for Pacific Salmonids” ([NOAA Technical Memorandum NMFS-NWFSC-38](#)).
- ❖ April 2000 – NMFS releases “Ecological and Behavioral Impacts of Artificial Production Strategies on the Abundance of Wild Salmon Populations” ([NOAA Technical Memorandum NMFS-NWFSC-41](#)).
- ❖ June 2000 – NMFS releases “Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units” ([NOAA Technical Memorandum NMFS-NWFSC-42](#)).
- ❖ June 2002 – NMFS releases “Review of Potential Impacts of Atlantic Salmon Culture on Puget Sound Chinook Salmon and Hood Canal Summer-Run Chum Salmon Evolutionarily Significant Units” ([NOAA Technical Memorandum NMFS-NWFSC-53](#)).
- ❖ April 2003 – NMFS releases “Assessing Extinction Risk for West Coast Salmon Proceedings of the Workshop November 13–15, 1996 Seattle, Washington” ([NOAA Technical Memorandum NMFS-NWFSC-56](#)).
- ❖ December 2003 – NMFS releases “Ecosystem Recovery Planning for Listed Salmon: An Integrated Assessment Approach for Salmon Habitat” ([NOAA Technical Memorandum NMFS-NWFSC-58](#)).
- ❖ May 2004 – NMFS publishes “Population Genetics of Entiat River Spring Chinook Salmon” ([NOAA Technical Memorandum NMFS-NWFSC-60](#)).
- ❖ December 2004 – NMFS releases “Review of Relative Fitness of Hatchery and Natural Salmon” ([NOAA Technical Memorandum NMFS-NWFSC-61](#)).
- ❖ February 2005 – NMFS releases “Effects of the Federal Columbia River Power System on Salmonid Populations” ([NOAA Technical Memorandum NMFS-NWFSC-63](#)).
- ❖ March 2005 – NMFS releases “Passage of Adult and Juvenile Salmonids through Federal Columbia River Power System Dams” ([NOAA Technical Memorandum NMFS-NWFSC-64](#)).
- ❖ June 2005 – NMFS releases “Updated Status of Federally Listed ESUs of West Coast Salmon and Steelhead” ([NOAA Technical Memorandum NMFS-NWFSC-66](#)).
- ❖ August 2005 – NMFS publishes “Salmon at River's End: The Role of the Estuary in the Decline and Recovery of Columbia River Salmon” ([NOAA Technical Memorandum NMFS-NWFSC-68](#)).
- ❖ September 2005 – NMFS publishes “Role of the Estuary in the Recovery of Columbia River Basin Salmon and Steelhead: An Evaluation of the Effects of Selected Factors on Salmonid Population Viability” ([NOAA Technical Memorandum NMFS-NWFSC-69](#)).
- ❖ February 2006 – NMFS publishes “Historical Population Structure of Pacific Salmonids in the Willamette River and Lower Columbia River Basins” ([NOAA Technical Memorandum NMFS-NWFSC-73](#)).
- ❖ July 2006 – NMFS publishes “Independent Populations of Chinook Salmon in Puget Sound” ([NOAA Technical Memorandum NMFS-NWFSC-78](#)).

- ❖ June 2007 – NMFS releases “Status Review of Puget Sound Steelhead (*Oncorhynchus mykiss*)” ([NOAA Technical Memorandum NMFS-NWFSC-81](#)).
- ❖ October 2007 – NMFS releases “An Overview of Sensory Effects on Juvenile Salmonids Exposed to Dissolved Copper: Applying a Benchmark Concentration Approach to Evaluate Sublethal Neurobehavioral Toxicity” ([NOAA Technical Memorandum NMFS-NWFSC-83](#)).
- ❖ January 2009 – NMFS releases “Identification of an Independent Population of Sockeye Salmon in Lake Ozette, Washington” ([NOAA Technical Memorandum NMFS-NWFSC-96](#)).
- ❖ February 2009 – NMFS releases “Protocols for Monitoring Habitat Restoration Projects in the Lower Columbia River and Estuary” ([NOAA Technical Memorandum NMFS-NWFSC-97](#)).
- ❖ April 2009 – NMFS releases “Viability Criteria for the Lake Ozette Sockeye Salmon Evolutionarily Significant Unit” ([NOAA Technical Memorandum NMFS-NWFSC-99](#)).
- ❖ August 2009 – NMFS releases “Determination of Independent Populations and Viability Criteria for the Hood Canal Summer Chum Salmon Evolutionarily Significant Unit” ([NOAA Technical Memorandum NMFS-NWFSC-101](#)).
- ❖ November 2009 – NMFS releases “A Synthesis of Diets and Trophic Overlap of Marine Species in the California Current” ([NOAA Technical Memorandum NMFS-NWFSC-103](#)).

Chinook Salmon

Seventeen Chinook salmon ESUs have been identified in California, Idaho, Oregon, and Washington states. Eight of these ESUs are found in Washington State. The Upper Columbia River spring-run ESU of Chinook salmon is ESA listed as “Endangered”. Any activities/take concerning this ESU requires a Section 10 permit. The Lower Columbia River, Puget Sound, Snake River fall-run, and Snake River spring/summer-run ESUs of Chinook salmon are ESA listed as “Threatened”. All five of these ESUs have critical habitat determined. The mid-Columbia River spring-run, Upper Columbia River summer/fall-run, and Washington coast ESUs of Chinook salmon are considered as “not warranted” of ESA listing.

Chinook Salmon timeline

- ❖ 15 October 1991 – NMFS proposes to list the Snake River spring/summer-run and fall-run ESUs of Chinook salmon as threatened. NMFS requests scientific information to determine critical habitat ([56 FR 51684](#)).
- ❖ **22 April 1992 – NMFS lists Snake River spring/summer-run and fall-run ESUs of Chinook salmon as “Threatened”** ([57 FR 14653](#)).
- ❖ 2 December 1992 – NMFS proposes critical habitat for the Snake River spring/summer-run and fall-run ESUs of Chinook salmon; comment period is initiated ([57 FR 57051](#)).
- ❖ 3 September 1993 – NMFS is petitioned to list mid-Columbia River summer-run Chinook salmon by eleven organizations (6/3/1993). NMFS initiates status review ([58 FR 46944](#)).
- ❖ 28 December 1993 – NMFS designates critical habitat for Snake River spring/summer-run and fall-run ESUs of Chinook salmon ([58 FR 68543](#)).
- ❖ **18 August 1994 – NMFS takes emergency action to reclassify Snake River spring/summer-run and fall-run ESUs of Chinook salmon from “Threatened” to “Endangered” until 5/26/1995** ([59 FR 42529](#)).
- ❖ 12 September 1994 – NMFS concludes that substantial scientific information indicating that a listing may be warranted and that the agency would initiate ESA status reviews for Chinook salmon and other species of anadromous salmonids in the Pacific Northwest ([59 FR 46808](#)).
- ❖ 23 September 1994 – NMFS determines that the mid-Columbia River summer-run Chinook salmon does not constitute a “species”, is part of a larger ESU (summer/fall-run), and that “this ESU does not warrant listing” ([59 FR 48855](#)).
- ❖ 28 December 1994 – NMFS proposes permanently reclassifying Snake River spring/summer-run and fall-run ESUs of Chinook salmon from “Threatened” to “Endangered” ([59 FR 66784](#)).

- ❖ 8 June 1995 – NMFS is petitioned to list entire West Coast Chinook salmon population (60 FR 30263).
- ❖ 17 December 1997 – NMFS releases “Review of the Status of Chinook Salmon (*Oncorhynchus tshawytscha*) from Washington, Oregon, California, and Idaho under the U.S. Endangered Species Act.”
- ❖ 12 January 1998 – NMFS withdraws proposed rule to permanently reclassify Snake River spring/summer-run and fall-run ESUs of Chinook salmon from “Threatened” to “Endangered” (63 FR 1807).
- ❖ 30 January 1998 – NMFS determines that revision of critical habitat for Snake River spring/summer-run and fall-run ESUs of Chinook salmon is not warranted (63 FR 4615).
- ❖ 9 March 1998 – NMFS proposes “Endangered” status for Upper Columbia River spring-run ESU of Chinook salmon and “Threatened” status for the Puget Sound and Lower Columbia River ESUs of Chinook salmon. NMFS proposes redefining the Snake River fall-run ESU of Chinook salmon to include the Deschutes River and proposes changes in its critical habitat. Also, NMFS changes the name of the mid-Columbia River summer/fall-run ESU of Chinook salmon to Upper Columbia River summer/fall-run ESU of Chinook salmon (63 FR 11482).
- ❖ 23 December 1998 – “Status Review Update for West Coast Chinook Salmon from Puget Sound, Lower Columbia River, Upper Willamette River, and Upper Columbia River Spring Run ESUs” is released. NMFS concludes that the Puget Sound and Lower Columbia River ESUs of Chinook salmon are “at risk of endangerment” and the Upper Columbia River spring-run ESU of Chinook salmon “remains at risk of extinction.”
- ❖ 4 March 1999 – “Evaluation of the Status of Chinook and Chum Salmon and Steelhead Hatchery Populations for ESUs Identified in Final Listing Determinations” is released. Hatchery stocks are compared to listed ESUs to determine which stocks should be considered part of the final listing determinations.
- ❖ **24 March 1999 – NMFS lists the Upper Columbia River spring-run ESU of Chinook salmon as “Endangered” and the Puget Sound and Lower Columbia River ESUs of Chinook salmon as “Threatened”.** The redefinition of the Snake River fall-run ESU of Chinook salmon to include the Deschutes River is still under review (64 FR 14308).
- ❖ 2 June 1999 – NMFS proposes excluding areas upstream of Napias Creek Falls to the critical habitat for Snake River spring/summer-run ESU of Chinook salmon (64 FR 29618).
- ❖ 16 July 1999 – “Status Review Update for Deferred ESUs of West Coast Chinook Salmon from Washington, Oregon, California, and Idaho” is released. The BRT conclusions for the Snake River fall-run ESU of Chinook salmon did not substantially change “and the status of this ESU was not revisited.”
- ❖ 16 September 1999 – NMFS determines that redefining the Snake River fall-run ESU of Chinook salmon to include the Deschutes River is “not warranted” (64 FR 50393).
- ❖ 25 October 1999 – NMFS revises critical habitat for the Snake River spring/summer-run ESU of Chinook salmon to exclude areas upstream of Napias Creek Falls (64 FR 57399).
- ❖ 16 February 2000 – NMFS determines critical habitat for Puget Sound, Lower Columbia River, and Upper Columbia River spring-run ESUs of Chinook salmon (65 FR 7764).
- ❖ 12 June 2001 – NMFS accepts the resource management plan for the Puget Sound ESU of Chinook salmon developed by WDFW and the Puget Sound Indian Tribes (PSIT) (66 FR 31603).
- ❖ 5 July 2001 – NMFS accepts the tribal resource management plan for the Puget Sound ESU of Chinook salmon developed by the Northwest Indian Fisheries Commission (66 FR 35407).
- ❖ 11 February 2002 – NMFS receives six delisting petitions, which include the threatened Puget Sound, Snake River spring/summer-run, Snake River fall-run, and Lower Columbia River ESUs and the endangered Upper Columbia River spring-run ESU of Chinook salmon. NMFS requests information to determine if status reviews of these ESUs need to be reopened (67 FR 6215).
- ❖ 8 August 2002 – NMFS notifies intent to prepare an EIS for the Puget Sound ESU of Chinook

salmon ([67 FR 51547](#)).

- ❖ 20 April 2005 – NMFS releases draft Interim Regional Recovery Plan for Lower Columbia River within the Washington Lower Columbia Management Unit and opens comment period ([70 FR 20531](#)).
- ❖ 2 September 2005 – NMFS redefines critical habitat for Puget Sound, Lower Columbia River, and Upper Columbia River spring-run ESUs of Chinook salmon ([70 FR 52630](#)).
- ❖ 27 December 2005 – NMFS proposes “Puget Sound Salmon Recovery Plan” (RMP) for the Puget Sound ESU of Chinook salmon and requests comments ([70 FR 76445](#)).
- ❖ 14 March 2006 – NMFS proposes “Snake River Salmon Recovery Plan for Southeast Washington” (RMP) for the Snake River spring/summer-run and Snake River fall-run ESUs of Chinook salmon and requests comments ([71 FR 13094](#)).
- ❖ 29 September 2006 – NMFS proposes “Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan” and requests comments ([71 FR 57472](#)).
- ❖ 19 January 2007 – NMFS adopts “[Puget Sound Salmon Recovery Plan](#)” (RMP) for the Puget Sound ESU of Chinook salmon ([72 FR 2493](#)).
- ❖ 12 March 2007 – NMFS releases management plan submitted by the Northwest Indian Fisheries Commission (NWIFC) concerning the Puget Sound ESU of Chinook salmon for comments ([72 FR 10984](#)).
- ❖ 9 October 2007 – NMFS adopts “[Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan](#)” ([72 FR 57303](#)).
- ❖ 18 March 2010 – NMFS initiates a status review of 16 ESUs and 11 DPSs of Pacific salmon and steelhead ([75 FR 13082](#)).

Chum Salmon

Chum salmon have the widest distribution of all Pacific salmonids ranging from Korea into the Siberian Arctic and Canadian Arctic and down the west coast into Oregon. In the Pacific Northwest, chum salmon are broken down into four ESUs. Two of the ESUs are ESA listed as “Threatened” (Columbia River and Hood Canal summer-run chum salmon), while the other two are not listed (Pacific Coast and Puget Sound/Strait of Georgia chum salmon).

Chum salmon timeline

- ❖ 14 March 1994 – Three organizations (PRO-Salmon, Hood Canal summer-run chum salmon 3/14/94; Save Allison Springs Citizens Committee, Puget Sound fall-run chum salmon, 4/4/94; Trout Unlimited, Hood Canal summer-run chum salmon, 5/20/94) petition NMFS to list chum salmon as threatened or endangered status under the ESA.
- ❖ 12 September 1994 – NMFS concludes that substantial scientific information indicates that listing may be warranted and that the agency must initiate ESA status reviews for chum salmon and other species of anadromous salmonids in the Pacific Northwest ([59 FR 46808](#)).
- ❖ 10 March 1998 – NMFS proposes threatened status and critical habitat for both the Hood Canal summer-run and the Columbia River ESUs of chum salmon ([63 FR 11773](#)).
- ❖ 4 March 1999 – “[Evaluation of the Status of Chinook and Chum Salmon and Steelhead Hatchery Populations for ESUs Identified in Final Listing Determinations](#)” is released. Hatchery stocks are compared to listed ESUs to determine which stocks should be considered part of the final listing determinations.
- ❖ **25 March 1999 – NMFS lists the Hood Canal summer-run and the Columbia River ESUs of chum salmon as “Threatened” species ([64 FR 14507](#)).**
- ❖ 16 February 2000 – NMFS designates critical habitat for Hood Canal summer-run and Columbia River ESUs of chum salmon ([65 FR 7764](#)).
- ❖ April 2000 – A comprehensive recovery plan titled “[Summer Chum Salmon Conservation Initiative](#)” is released. The recovery plan applies to all summer-run chum salmon returning to

streams in Hood Canal and the eastern Strait of Juan de Fuca, including streams that may no longer support summer-run chum salmon. WDFW and the Point No Point Treaty Tribes prepared this plan in cooperation with USFWS and NOAA.

- ❖ 13 March 2001 – NMFS receives recovery plan and opens up comment period ([66 FR 14551](#)).
- ❖ 3 April 2001 – NMFS receives 8 HGMPs (4 WDFW, 4 USFWS) for the Hood Canal summer-run ESU of chum salmon and opens comment period ([66 FR 17684](#)).
- ❖ 12 June 2001 – NMFS adopts recovery plan. Fisheries will be authorized within the guidelines of the initiative ([66 FR 31600](#)).
- ❖ 20 April 2005 – NMFS releases draft Interim Regional Recovery Plan for Lower Columbia River within the Washington Lower Columbia Management Unit and opens comment period ([70 FR 20531](#)).
- ❖ 2 September 2005 – NMFS redefines critical habitat for both Hood Canal summer-run and Columbia River ESUs of chum salmon ([70 FR 52630](#)).
- ❖ 16 August 2006 – NMFS releases the Hood Canal summer-run ESU of chum salmon recovery plan prepared by the Hood Canal Coordinating Council (HCCC) for comments ([71 FR 47180](#)).
- ❖ 12 March 2007 – NMFS releases management plan submitted by the Northwest Indian Fisheries Commission (NWIFC) concerning the Hood Canal summer-run ESU of chum salmon for comments ([72 FR 10984](#)).
- ❖ 24 May 2007 – NMFS announces the adoption of an ESA Recovery Plan for the Hood Canal and Eastern Strait of Juan de Fuca Summer Chum Salmon ESU ([72 FR 29121](#)).
- ❖ December 2007 – The five-year review for the “[Summer Chum Salmon Conservation Initiative](#)” recovery plan is released.
- ❖ 18 March 2010 – NMFS initiates a status review of 16 ESUs and 11 DPSs of Pacific salmon and steelhead ([75 FR 13082](#)).

Coho Salmon

Currently, seven coho salmon ESUs are identified from southern British Columbia to southern California with four coho salmon ESUs residing in Washington State – Lower Columbia River, Olympic Peninsula, Puget Sound/Strait of Georgia, and Southwest Washington ESUs. Only the Lower Columbia River ESU of coho salmon has federal ESA status (Threatened; 8/29/2005); and its critical habitat determination is currently under review, but considered of low priority by NMFS.

Coho Salmon timeline

- ❖ 7 June 1990 – NMFS receives a petition from Oregon Trout and 5 co-petitioners to ESA list the Lower Columbia River coho salmon and determine critical habitat.
- ❖ 27 June 1991 – NMFS determines that the Lower Columbia coho salmon does not constitute a “species”; and therefore, its listing is considered “not warranted” at that time ([56 FR 29553](#)).
- ❖ 21 July 1993 – NMFS receives a petition from Oregon Trout, Portland Audubon Society, and Siskiyou Regional Educational Project to list and designate critical habitat for five Oregonian coho salmon ESUs.
- ❖ 20 October 1993 – NMFS receive a petition from Pacific Rivers Council and 22 co-petitioners to list and designate critical habitat for all coho salmon populations in Washington, Idaho, Oregon, and California.
- ❖ 27 October 1993 – NMFS determines that a listing may be warranted, soliciting status information of all coho salmon populations in Washington, Oregon, and California ([58 FR 57770](#)).
- ❖ 26 January 1994 – NMFS determines that a non-emergency listing may be warranted, soliciting information about the status of all “coastwide” coho salmon populations ([59 FR 3662](#)).

- ❖ 25 July 1995 – NMFS identifies six coho salmon ESUs. The Puget Sound/Strait of Georgia and Lower Columbia River/Southwest Washington ESUs of coho salmon were both proposed as candidate species (60 FR 38011).
- ❖ 20 December 1996 – In a [NMFS Memorandum](#), the West Coast Salmon Biological Review Team (BRT) concludes that the Southwest Washington/Lower Columbia River ESU of coho salmon should be split into two ESUs based upon recent genetic data results.
- ❖ 3 November 2000 – NMFS receives petition and determines that substantial information exists to consider the Lower Columbia River ESU of coho salmon as a candidate ESA species (65 FR 66221).
- ❖ 11 February 2002 – NMFS in process of updating Lower Columbia River/Southwest Washington ESU of coho salmon and solicits for more information (67 FR 6215).
- ❖ 14 June 2004 – NMFS proposes listing the Lower Columbia River ESU of coho salmon as threatened while defining its range from the Columbia River mouth up to and including the Big White Salmon and Hood Rivers (69 FR 33101).
- ❖ **28 June 2005 – NMFS lists the Lower Columbia River ESU of coho salmon as “Threatened” effective 29 August 2005 (70 FR 37160).**
- ❖ 31 July 2009 – NMFS determines that the Queets River and the Western Strait of Juan de Fuca stocks of coho salmon are of overfished status due to their failure to meet escapement goals for the third consecutive year (74 FR 68043).
- ❖ 18 March 2010 – NMFS initiates a status review of 16 ESUs and 11 DPSs of Pacific salmon and steelhead (75 FR 13082).

Pink Salmon

The southern extent of Pink Salmon spawning grounds in North America is Washington State. Two ESUs are found in Washington, “even-year” and “odd-year” ESUs; and neither ESU is considered to be “Threatened” nor “Endangered” by NMFS.

Pink Salmon timeline

- ❖ 14 March 1994 - PRO-S files a petition to list nine populations of northwest Washington salmon, including Elwha and Lower Dungeness rivers pink salmon, as “Threatened” or “Endangered” under the ESA.
- ❖ 12 September 1994 – NMFS publishes a notification in the Federal Register. NMFS concludes that substantial scientific information indicating that a listing may be warranted and that the agency would initiate ESA status reviews for pink salmon and other species of anadromous salmonids in the Pacific Northwest (59 FR 46808).
- ❖ 4 October 1995 – NMFS concludes that listing “even-year” and “odd-year” ESUs of pink salmon listing is not warranted (60 FR 51928).

Sockeye Salmon

Seven sockeye salmon ESUs have been identified in the Western United states. Of the seven sockeye salmon ESUs, one is ESA-listed as “Endangered” (Snake River ESU), one is ESA-listed as “Threatened” (Ozette Lake ESU) and the other five are ESA-listed as “not warranted” (Baker River, Lake Pleasant, Lake Wenatchee, Okanogan River, and Quinault Lake ESUs).

Sockeye salmon timeline

- ❖ 9 April 1990 – NMFS begins status review of the Snake River ESU of sockeye salmon (55 FR 13181).
- ❖ 5 April 1991 – NMFS proposes to list the Snake River ESU of sockeye salmon as “Endangered” (56 FR 14055).

- ❖ 15 October 1991 – NMFS requests scientific information to determine critical habitat for the Snake River ESU of sockeye salmon ([56 FR 51684](#)).
- ❖ **3 January 1992** – NMFS lists Snake River ESU of sockeye salmon as “Endangered” ([57 FR 212](#)).
- ❖ 2 December 1992 – NMFS proposes critical habitat for the Snake River ESU of sockeye salmon ([57 FR 57051](#)).
- ❖ 28 December 1993 – NMFS designates critical habitat for the Snake River ESU of sockeye salmon ([58 FR 68543](#)).
- ❖ 10 March 1998 – NMFS proposes listing the Ozette River ESU of sockeye salmon as “Threatened” and retaining the Baker River ESU of sockeye salmon as a “candidate” species. The Lake Pleasant, Lake Wenatchee, Okanogan River, and Quinault Lake ESUs of sockeye salmon are determined to be “not warranted” for ESA listing ([63 FR 11749](#)).
- ❖ 17 December 1998 – NMFS releases “[Status Review Update for Sockeye Salmon from Ozette Lake and Baker River, Washington](#)” prepared by the West Coast Sockeye Salmon BRT.
- ❖ **25 March 1999** – NMFS lists the Ozette Lake ESU of sockeye salmon as “Threatened” and changes the status of the Baker River ESU of sockeye salmon to “not warranted” ([64 FR 14528](#)).
- ❖ 16 February 2000 – NMFS determines critical habitat for the Ozette Lake ESU of sockeye salmon ([65 FR 7764](#)).
- ❖ 9 April 2004 – NMFS accepts joint resource management plan between the Makah tribe and WDFW for the Ozette Lake ESU of sockeye salmon ([69 FR 18874](#)).
- ❖ 14 December 2004 – NMFS redefines critical habitat for the Ozette Lake ESU of sockeye salmon ([69 FR 74572](#)).
- ❖ 14 March 2006 – NMFS proposes “Snake River Salmon Recovery Plan for Southeast Washington” (RMP) for the Snake River ESU of sockeye salmon and requests comments ([71 FR 13094](#)).
- ❖ 23 April 2008 – NMFS proposes “Lake Ozette Sockeye Salmon Recovery Plan” and requests comments ([73 FR 21913](#)).
- ❖ 29 May 2009 – NMFS adopts the “Lake Ozette Sockeye Salmon Recovery Plan” ([74 FR 25706](#)).
- ❖ 18 March 2010 – NMFS initiates a status review of 16 ESUs and 11 DPSs of Pacific salmon and steelhead ([75 FR 13082](#)).

Steelhead

NOAA Fisheries has identified 15 DPSs of steelhead in Washington, Oregon, Idaho, and California. Within the Washington state, the Upper Columbia River, Snake River Basin, Middle Columbia River, Lower Columbia River, and Puget Sound DPSs of steelhead are listed as “Threatened;” and the Southwest Washington and Olympic Peninsula DPSs of steelhead are considered “not warranted” of ESA listing

Steelhead timeline

- ❖ 23 December 1993 – NMFS receives petition from Washington Trout (9/21/1993) to list the Deer Creek summer steelhead and designate critical habitat. NMFS initiates status review ([58 FR 68108](#)).
- ❖ 27 May 1994 – NMFS receives petition from Oregon Natural Resources Council and 15 co-petitioners (2/16/1994) to list and designate critical habitat for steelhead throughout the entire California, Idaho, Oregon, and Washington range. NMFS initiates status review ([59 FR 27527](#)).
- ❖ 21 November 1994 – NMFS determines that the Deer Creek summer steelhead do not constitute a species, but are part of a larger ESU that is currently undergoing status review ([59 FR 59981](#)).
- ❖ 9 August 1996 – NMFS identifies 15 steelhead ESUs. NMFS proposes the Upper Columbia River ESU of steelhead as “Endangered;” the Snake River Basin, Lower Columbia River ESUs of

steelhead as “Threatened;” and the Middle Columbia River ESU of steelhead as a “candidate” species (61 FR 41541).

- ❖ **18 August 1997** – NMFS lists the **Upper Columbia River ESU of steelhead as “Endangered” and the Snake River ESU of steelhead as “Threatened”** (62 FR 43937). NMFS extends the final ESA listing decisions by 6 months on the Lower Columbia River ESU and four other ESUs of steelhead for more analysis (62 FR 43974)
- ❖ 10 March 1998 – NMFS proposes listing the Middle Columbia River ESU of steelhead as “Threatened” (63 FR 11797).
- ❖ **19 March 1998** – NMFS lists the **Lower Columbia River ESU of steelhead as “Threatened”** (63 FR 13347).
- ❖ 5 February 1999 – NMFS proposes critical habitat for the Lower Columbia River, Middle Columbia River, Upper Columbia River, and Snake River Basin ESUs of steelhead (64 FR 5740).
- ❖ **25 March 1999** – NMFS lists the **Middle Columbia River ESU of steelhead as “Threatened”** (64 FR 14517).
- ❖ 16 February 2000 – NMFS designates critical habitat for the Lower Columbia River, Middle Columbia River, Upper Columbia River, and Snake River Basin ESUs of steelhead (65 FR 7764).
- ❖ 27 December 2000 – NMFS receives the Tucannon River summer steelhead HGMP from WDFW. NMFS opens comment period (68 FR 81832).
- ❖ 14 January 2003 – NMFS receives and opens for comment 10 HGMPs including Touchet River endemic summer steelhead and Walla Walla River summer steelhead – Lyons Ferry Hatchery Stock (68 FR 1819).
- ❖ 14 June 2004 – NMFS proposes downlisting the Upper Columbia River ESU of steelhead from “Endangered” to “Threatened.” NMFS also discusses delineating *O. mykiss* into DPSs instead of ESUs (69 FR 33102).
- ❖ 13 September 2004 – NMFS receives a petition from Mr. Sam Wright to list the Puget Sound ESU of steelhead as “Threatened” or “Endangered.”
- ❖ 14 December 2004 – NMFS redesignates critical habitat for the Lower Columbia River, Middle Columbia River, Upper Columbia River, and Snake River Basin ESUs of steelhead (69 FR 74572).
- ❖ 5 April 2005 – NMFS finds that the petition to list the Puget Sound ESU of steelhead presents substantial information to warrant listing and initiates a status review (70 FR 17223).
- ❖ 20 April 2005 – NMFS announces the availability of the Draft Interim Regional Recovery Plan for the Washington Lower Columbia Management Unit (70 FR 20531).
- ❖ 7 July 2005 – NMFS announces intent to develop recovery plans for 16 ESUs of Pacific salmon and steelhead, including the Lower Columbia River, Middle Columbia River, Upper Columbia River, and Snake River Basin ESUs of steelhead (70 FR 39231).
- ❖ 2 September 2005 – NMFS finalizes critical habitat for the Lower Columbia River, Middle Columbia River, Upper Columbia River, and Snake River Basin ESUs of steelhead (70 FR 52630).
- ❖ 4 November 2005 – NMFS proposes changing the delineation of *Oncorhynchus mykiss* populations from ESUs to DPSs (70 FR 67130).
- ❖ **5 January 2006** – NMFS changes *O. mykiss* designations from ESUs to DPSs. **NMFS downlists the Upper Columbia River DPS of steelhead from “Endangered” to “Threatened”** (71 FR 834).
- ❖ 1 February 2006 – NMFS applies the protective regulations for threatened West Coast salmon and steelhead to the Upper Columbia River DPS of steelhead (71 FR 5178).
- ❖ 14 March 2006 – NMFS announces the availability for public comment of the “Draft Snake River Salmon Recovery Plan for Southeast Washington” and its supplement (71 FR 13094).
- ❖ 29 March 2006 – NMFS proposes the Puget Sound DPS of steelhead as “Threatened” (71 FR 15666).

- ❖ 29 September 2006 – NMFS proposes “Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan” and requests comments ([71 FR 57472](#)).
- ❖ **11 May 2007 – NMFS lists Puget Sound DPS of steelhead as “Threatened”** ([72 FR 26722](#)).
- ❖ 9 October 2007 – NMFS adopts “Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan” ([72 FR 57303](#)).
- ❖ 25 September 2008 – NMFS applies the ESA protective regulations for threatened West Coast salmon and steelhead to Puget Sound DPS of steelhead ([73 FR 55451](#)).
- ❖ 14 November 2008 – NMFS receives the Puget Sound steelhead harvest management plan from WDFW and PSIT.
- ❖ **24 August 2009 – NMFS downlists the Upper Columbia River DPS of steelhead from “Endangered” to “Threatened”** ([74 FR 42605](#)).
- ❖ 30 September 2009 – NMFS adopts Recovery Plan for Middle Columbia River DPS of steelhead ([74 FR 50165](#)).
- ❖ 18 March 2010 – NMFS initiates a status review of 16 ESUs and 11 DPSs of Pacific salmon and steelhead ([75 FR 13082](#)).
- ❖ 2 April 2010 – NMFS opens a 30-day comment period on the Snake River DPS of steelhead FMEP submitted by WDFW ([75 FR 16738](#)).

OTHER SALMONIDS

Bull Trout

Bull trout range along the coast from Alaska to Oregon and inland to Montana, Nevada, and Alberta with five DPSs found in the contiguous US. In Washington state, there are two DPSs – the Columbia River bull trout DPS and the Coastal/Puget Sound bull trout DPS. All bull trout found in the conterminous US are federally listed as “Threatened” species. On 14 January 2010, NMFS proposes revised critical habitat for bull trout in the conterminous U.S.

Bull Trout timeline

- ❖ 17 May 1993 – USFWS announces petition finding and initiates status review for bull trout ([58 FR 28849](#)).
- ❖ 10 June 1994 – USFWS finds that listing bull trout throughout its range is “not warranted.” Sufficient information exists to consider listing bull trout within the conterminous US, “but (is) precluded due to other higher priority listing actions” ([59 FR 30254](#)).
- ❖ 12 June 1995 – USFWS notifies about the on-going status review, request for more information, but is still “precluded due to other higher priority listing actions” for the conterminous US bull trout population ([60 FR 30825](#)).
- ❖ 13 June 1997 – USFWS proposes listing the Columbia River DPS of bull trout as a “Threatened” species ([62 FR 32268](#)).
- ❖ **10 June 1998 – USFWS lists the Columbia River DPS of bull trout as “Threatened”** ([63 FR 31647](#)). USFWS proposes listing the Coastal/Puget Sound bull trout population ([63 FR 31693](#)).
- ❖ **1 November 1999 – USFWS lists all coterminous US populations of bull trout as “Threatened”** ([64 FR 58910](#)). USFWS proposes special regulations under the authority of Section 4(d) of the ESA ([64 FR 58934](#)).
- ❖ 29 November 2002 – USFWS proposes critical habitat for the Columbia River DPS of bull trout ([67 FR 71235](#)). USFWS announces the [draft recovery plan](#) availability for 3 of the 5 bull trout DPSs, including the Columbia River DPS ([67 FR 71439](#)).
- ❖ 13 April 2004 – USFWS initiates and requests data for a 5-year bull trout review ([69 FR 19449](#)).
- ❖ 25 June 2004 – USFWS proposes critical habitat for the Coastal/Puget Sound DPS of bull trout ([69 FR 35768](#)).
- ❖ 1 July 2004 – USFWS extends comment period for the 5-year bull trout review ([69 FR 39949](#)).

USFWS announces the availability of the “[Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout](#)” and “[Draft Recovery Plan for the Olympic Peninsula Distinct Population Segment of Bull Trout](#)” (69 FR 39950).

- ❖ 6 October 2004 – USFWS designates critical habitat for the Columbia River DPS of bull trout (69 FR 59996).
- ❖ 26 September 2005 – USFWS designates critical habitat for the Coastal/Puget Sound DPS of bull trout (70 FR 56212).
- ❖ 29 September 2006 – NMFS proposes “Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan” and requests comments (71 FR 57472).
- ❖ 9 October 2007 – NMFS adopts “[Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan](#)” (72 FR 57303).
- ❖ 25 April 2008 – USFWS releases “[Bull Trout \(*Salvelinus confluentus*\) 5-Year Review: Summary and Evaluation.](#)”
- ❖ 14 January 2010 – USFWS proposes redesignation of critical habitat for bull trout in the conterminous U.S. (75 FR 2270).

Cutthroat Trout

There are fourteen subspecies of cutthroat trout in the western U.S.; and of these fourteen subspecies, two are found in Washington state: coastal cutthroat trout (also known as sea-run cutthroat trout) and westslope cutthroat trout. Six coastal cutthroat trout ESUs have been identified with three ESUs found in Washington state: Puget Sound/Strait of Georgia, Olympic Peninsula, and Southwest Washington/Columbia River. Westslope cutthroat trout have not had populations divided into DPSs. Neither of the two Washington state cutthroat trout subspecies is currently ESA-listed as “Threatened” nor “Endangered.”

Cutthroat Trout timeline

- ❖ 6 June 1997 – USFWS receives petition from six organizations and one individual to list the westslope cutthroat trout as threatened and to designate critical habitat. On 25 January 1998, USFWS receives amended petition with a substantial amount of new information.
- ❖ 18 December 1997 – NMFS receives petition from Oregon Natural Resources Council to list and designate critical habitat for sea-run cutthroat trout in Washington, Oregon, and California.
- ❖ 23 March 1998 – NMFS determines that sea-run cutthroat trout listing may be warranted and requests more information (from a previous status review by NMFS) (63 FR 13833).
- ❖ 10 June 1998 – USFWS find that the listing of westslope cutthroat trout may be warranted and initiates status review (63 FR 31691).
- ❖ 17 August 1998 – USFWS reopens comment period for westslope cutthroat trout (63 FR 43901).
- ❖ January 1999 – NMFS publishes “Status Review of Coastal Cutthroat Trout from Washington, Oregon, and California” (NOAA Technical Memorandum NMFS-NWFSC-37).
- ❖ 5 April 1999 – NMFS proposes listing the southwestern Washington/Columbia River ESU of cutthroat trout as “Threatened” (64 FR 16397).
- ❖ September 1999 – USFWS releases “[Status Review for Westslope Cutthroat Trout in the United States.](#)” USFWS “found no compelling evidence in support of recognizing distinct population segments for westslope cutthroat trout.”
- ❖ 14 April 2000 – USFWS decides that the ESA-listing of the westslope cutthroat trout is “not warranted” (65 FR 20120). USFWS extends deadline by six months for decision on the proposed listing of the southwestern Washington/Columbia River ESU of cutthroat trout as “Threatened” (65 FR 20123).
- ❖ 21 April 2000 – Notice given that USFWS will assume all ESA regulatory authorization over coastal cutthroat trout (65 FR 21376).

- ❖ 2 June 2000 - USFWS reopens comment period and adds a public hearing for the proposed listing of the southwestern Washington/Columbia River cutthroat trout as “Threatened” (65 FR 35315).
- ❖ 14 July 2000 – USFWS provides notice that take prohibitions will begin for the Southwestern Washington/Columbia River ESU of coastal cutthroat on the effective date of FR listing, if ESA-listed (65 FR 43730).
- ❖ 6 September 2000 – USFWS gives notification of a public hearing on the clarification of take prohibitions for the Southwestern Washington/Columbia River ESU of coastal cutthroat, if ESA-listed (65 FR 53974).
- ❖ 23 November 2001 – USFWS reopens comment period for proposed listing of the southwestern Washington/Columbia River ESU of cutthroat trout as “Threatened” (66 FR 58706).
- ❖ 5 July 2002 – USFWS withdraws proposed rule to list the southwestern Washington/Columbia River DPS of coastal cutthroat trout as “Threatened” (67 FR 44933).
- ❖ 3 September 2002 – USFWS initiates new status review for westslope cutthroat trout and requests new data and other information (67 FR 56257).
- ❖ 18 December 2002 – USFWS opens public comment period for the new status review for westslope cutthroat trout (67 FR 77466).
- ❖ 7 August 2003 – USFWS finds that listing of the westslope cutthroat trout is “not warranted” (68 FR 46989).
- ❖ 3 February 2005 – USFWS sued by conservation groups for “not warranted” finding on proposed rule for listing the southwestern Washington/Columbia River DPS of cutthroat trout as “Threatened.” The US District Court/Oregon rules in favor of USFWS.
- ❖ 18 April 2008 – The United States Court of Appeals for the Ninth Circuit partially reverses and remands the *Center for Biological Diversity v. USFWS* decision. The court reversed and remanded the lack of USFWS consideration for the estuarine and marine areas as a significant portion of the DPS’s range.
- ❖ 24 March 2009 – USFWS opens comment period for the Southwestern Washington/Columbia River DPS of coastal cutthroat trout with particular concern for the estuarine and marine habitats for this DPS (74 FR 12297).
- ❖ 25 February 2010 – USFWS withdraws proposed rule to list the southwestern Washington/Columbia River DPS of coastal cutthroat trout as “Threatened”. Status stays as “not warranted” (75 FR 8621).

Kokanee

The Lake Sammamish kokanee population has been petitioned twice for ESA listing. On 6 May 2008, USFWS announced that the 2007 petition has substantial information that indicates listed status may be warranted and initiates a status review.

Kokanee timeline:

- ❖ 16 March 2000 – USFWS is petitioned by seven groups to emergency list the summer-run kokanee that spawn in Issaquah Creek, a tributary of Lake Sammamish, as an endangered DPS and to designate critical habitat. No action was taken due to workload demands and lack of funding.
- ❖ 9 July 2007 – USFWS is petitioned by seven groups to “list all wild, indigenous, naturally-spawned kokanee in Lake Sammamish, Washington, as a threatened or endangered species.”
- ❖ 23 October 2007 – USFWS finds that the summer-run Issaquah Creek kokanee does not represent a DPS and “therefore a listable entity.” This finding is based upon the 16 March 2000 petition (72 FR 59979).
- ❖ 6 May 2008 – USFWS finds that substantial information exists indicating that listed status may be warranted and initiates a status review for Lake Sammamish kokanee. This finding is based upon the 9 July 2007 petition (73 FR 24915).

OTHER WASHINGTON STATE FISH

Eulachon

Eulachon (also known as smelt, candlefish, and hooligan) range from northern California to southwest Alaska and the southeast Bering Sea. Eulachon spawn in glacier fed streams/rivers, develop in estuaries, and stay at sea for three to five years before returning to spawn. On 15 December 2008, NMFS released their status report on Pacific eulachon in response to their proposed ESA listing. For the conterminous US and southern British Columbia (south of the Naas River), the eulachon were described as the southern DPS. On 13 March 2009, the southern DPS of eulachon was proposed for listing as “Threatened.” On 18 March 2010, NMFS listed the southern DPS of eulachon as “Threatened” under the ESA effective 17 May 2010. Additional rules concerning critical habitat (expected later this year) and 4(d) prohibitions (expected in 2011) will be proposed in future Federal Register listings.

Eulachon Timeline

- ❖ 29 November 1999 – NMFS receives a petition from Mr. Sam Wright (16 July 1999) to list the Columbia River eulachon and designate critical habitat. “NMFS determines that the petition does not present substantial evidence to warrant the listing of the eulachon at this time” (64 FR 66601).
- ❖ 8 November 2007 – NMFS receives petition from the Cowlitz Indian Tribe to list the southern eulachon (Washington, Oregon, and California populations) as a “Threatened” or “Endangered” species under the ESA.
- ❖ 12 March 2008 – NMFS decides that the petition presents substantial information indicating that the petitioned action may be warranted. NMFS initiates a status review regarding population structure and status throughout their range from Alaska to California (73 FR 13186).
- ❖ 15 December 2008 – NMFS publishes “[Summary of Scientific Conclusions of the Review of the Status of Eulachon \(*Thaleichthys pacificus*\) in Washington, Oregon, and California.](#)” Eulachon populations from south of Naas River (British Columbia, Canada) to and including the Mad River (California) were described as the southern DPS of eulachon.
- ❖ 13 March 2009 – NMFS proposes the southern DPS of eulachon as “Threatened” (74 FR 10857).
- ❖ 20 January 2010 – NMFS publishes an updated status review “[Status Review Update for Eulachon in Washington, Oregon, and California](#)”
- ❖ **18 March 2010 – NMFS lists the southern DPS of eulachon as “Threatened” (75 FR 13012).**

Lamprey

Lamprey are considered one of the most primitive life forms dating back 300 million years and are composed of approximately 40 species worldwide. Lampreys spend up to 6 years of their life in fresh water sediment feeding on diatoms, after which they metamorphose into the adult form and either stay in freshwater or migrate to the sea. In Washington state, three lamprey species are found: Pacific lamprey, western brook lamprey, and river lamprey. Pacific and river lamprey are anadromous and parasitic while the western brook lamprey adults do not feed and stay in fresh water. The river lamprey is a federal “species of concern” and a state “candidate” species.

Lamprey timeline

- ❖ 27 January 2003 – USFWS receives a petition from eleven organizations requesting the listing of Pacific, western brook, river, and Kern brook lampreys DPSs in Oregon, Washington, Idaho, and California.
- ❖ 27 December 2004 – USFWS determines that the listing of Pacific, river, and western brook lampreys is “not warranted” (69 FR 77158).

Pacific Cod

Pacific cod are a member of the cod family (*Gadidae*), and they range from the northern Yellow Sea (China) across the North Pacific to southern California (US). They are rare south of northern California though. In Washington, the Puget Sound Pacific cod population is part of a larger DPS that ranges from Puget Sound to at least as far north as the Dixon Entrance (or possibly as far as southeast Alaska). Pacific cod is a federal “species of concern” and a state “candidate” species.

Pacific Cod timeline

- ❖ 8 February 1999 – NMFS is petitioned by Mr. Sam Wright to list and designate critical habitat for eighteen marine fish, including Pacific Cod.
- ❖ 21 June 1999 – NMFS determines that seven species, including Pacific Cod, present substantial information that may warrant listing ([64 FR 33037](#)).
- ❖ November 2000 – NMFS publishes “Status Review of Pacific Hake, Pacific Cod, and Walleye Pollock from Puget Sound, Washington” ([NOAA Technical Memorandum NMFS-NWFSC-44](#)).
- ❖ 24 November 2000 – NMFS publishes finding that Puget Sound populations of Pacific Cod are part of a larger DPS that does “not warrant” ESA listing ([65 FR 70514](#)).

Pacific Hake

Pacific hake, also known as Pacific whiting, are a member of the cod family. Pacific Hake range from central Baja California to the Gulf of Alaska with the Puget Sound population being part of the Georgia Basin DPS. The Georgia Basin DPS of Pacific hake is federally listed as a “species of concern” and is considered a “candidate” species in Washington State due to overfishing.

Pacific Hake timeline

- ❖ 8 February 1999 – NMFS is petitioned by Mr. Sam Wright to list and designate critical habitat for eighteen marine fish, including Pacific hake.
- ❖ 21 June 1999 – NMFS determines that seven species, including Pacific hake, present substantial information that may warrant listing ([64 FR 33037](#)).
- ❖ November 2000 – NMFS publishes “Status Review of Pacific Hake, Pacific Cod, and Walleye Pollock from Puget Sound, Washington” ([NOAA Technical Memorandum NMFS-NWFSC-44](#)).
- ❖ 24 November 2000 – NMFS publishes finding that Puget Sound populations of Pacific hake are part of the Georgia Basin DPS. Status will remain as a “candidate . . . because of remaining uncertainties about its stock structure and status” ([65 FR 70514](#)).
- ❖ August 2008 – NMFS publishes “The 2005 Integrated Acoustic and Trawl Survey of Pacific Hake, *Merluccius productus*, in U.S. and Canadian Waters off the Pacific Coast” ([NOAA Technical Memorandum NMFS-NWFSC-94](#)).

Pacific Herring

The Pacific herring is one of 180 species in the Clupeidae family, range from Baja California (Mexico) across the north Pacific to Korea, and are composed of several DPSs. Within the Georgia Basin DPS of Pacific herring, there are eight subpopulations with five residing within the state of Washington. The Cherry Point subpopulation has been petitioned to NMFS three times, and each time their listing was found to be “not warranted.”

Pacific Herring timeline

- ❖ 8 February 1999 – NMFS is petitioned by Mr. Sam Wright to list and designate critical habitat for eighteen marine fish, including Pacific herring.
- ❖ 21 June 1999 – NMFS determines that seven species, including Pacific herring, present substantial information that may warrant listing ([64 FR 33037](#)).

- ❖ March 2001 – NMFS publishes “Status Review of Pacific Herring (*Clupea pallasii*) in Puget Sound, Washington” (NOAA Technical Memorandum NMFS-NWFSC-45).
- ❖ 3 April 2001 – NMFS publishes finding stating that the petitioned Pacific herring populations are part of a larger DPS that does “not warrant” ESA-listing (66 FR 17659).
- ❖ 22 January 2004 – NMFS receives petition from six organizations and one individual to designate the Cherry Point stock of Pacific herring qualifies as a DPS and have them ESA listed. NMFS rules that the petition lacked substantial scientific and commercial information.
- ❖ 14 May 2004 – NMFS receives new genetic information about the Cherry Point stock and other stocks within Puget Sound and the Strait of Georgia from the above organizations. The additional information was treated as a new petition by NMFS.
- ❖ 10 August 2004 – NMFS finds that the submitted petition presents substantial information, and that the petition action may be warranted (69 FR 48455).
- ❖ 7 June 2005 – NMFS finds that the Cherry Point stock does not qualify as a DPS, for it is part of the larger Georgia Basin DPS. NMFS finds that the Georgia Basin DPS of Pacific herring ESA listing is “not warranted” (70 FR 33117).
- ❖ June 2006 – NMFS publishes “Status Review of Cherry Point Pacific Herring (*Clupea pallasii*) and Updated Status Review of the Georgia Basin Pacific Herring Distinct Population Segment under the Endangered Species Act” (NOAA Technical Memorandum NMFS-NWFSC-76).

Petrale Sole

Petrale Sole is a member of the Pleuronectidae family, also known as the righteye flounders. They are found along the west coast of North America from Baja California to Alaska and are commercially fished.

- ❖ 9 February 2010 – NMFS determines that the petrale sole is an overfished stock. The Pacific Fishery Management Council has two years to amend an FMP and/or implement regulations to rebuild petrale sole stocks (75 FR 11118).

Rockfish

Worldwide, there are about 100 species of rockfish with 65 species occurring in the northeastern Pacific Ocean. In Washington State, there are 31 rockfish species. At the state level, thirteen species are considered “state candidate” (Table 2). On 23 April 2009, NMFS proposed listing bocaccio as “Endangered”, canary rockfish as “Threatened”, and yelloweye rockfish as “Threatened” and determined that listing greenstripe rockfish and redstripe rockfish was “not warranted.” On 28 April 2010, NMFS listed bocaccio as “Endangered” and canary rockfish and yelloweye rockfish as “Threatened.”

Table 2. State and/or federal threatened or endangered ESA status for rockfish species in Washington State.

Species	State status	Federal status
Black rockfish (<i>Sebastes melanops</i>)	Candidate	--
Bocaccio (<i>S. paucispinis</i>)	Candidate	Endangered
Brown rockfish (<i>S. auriculatus</i>)	Candidate	Species of concern
Canary rockfish (<i>S. pinniger</i>)	Candidate	Threatened
China rockfish (<i>S. nebulosus</i>)	Candidate	--
Copper rockfish (<i>S. caurinus</i>)	Candidate	Species of concern
Greenstripe rockfish (<i>S. elongatus</i>)	Candidate	Not warranted
Quillback rockfish (<i>S. maliger</i>)	Candidate	Species of concern
Redstripe rockfish (<i>S. proriger</i>)	Candidate	Not warranted
Tiger rockfish (<i>S. nigrocinctus</i>)	Candidate	--
Widow rockfish (<i>S. entomelas</i>)	Candidate	--
Yelloweye rockfish (<i>S. ruberrimus</i>)	Candidate	Threatened
Yellowtail rockfish (<i>S. flavidus</i>)	Candidate	--

Rockfish timeline

- ❖ 8 February 1999 – NMFS is petitioned by Mr. Sam Wright to list and designate critical habitat for eighteen marine fish, including brown rockfish, copper rockfish, greenstripe rockfish, widow rockfish, yellowtail rockfish, quillback rockfish, black rockfish, blue rockfish (*Sebastes mystinus*), China rockfish, tiger rockfish, bocaccio, canary rockfish, redstripe rockfish, and yelloweye rockfish.
- ❖ 21 June 1999 – NMFS determines that seven species, including copper rockfish, quillback rockfish, and brown rockfish, present substantial information that may warrant listing ([64 FR 33037](#)).
- ❖ August 2000 – NMFS publishes “Guide to Rockfishes (Scorpaenidae) of the Genera *Sebastes*, *Sebastolobus*, and *Adelosebastes* of the Northeast Pacific Ocean, Second Edition” ([NOAA Technical Memorandum NMFS-AFSC-117](#)).
- ❖ March 2001 – NMFS publishes “Status Review of Copper Rockfish (*Sebastes caurinus*), Quillback Rockfish (*S. maliger*), and Brown Rockfish (*S. auriculatus*) in Puget Sound, Washington” ([NOAA Technical Memorandum NMFS-NWFSC-46](#)).
- ❖ 3 April 2001 – NMFS publishes finding stating that the petitioned copper rockfish, quillback rockfish, and brown rockfish do “not warrant” ESA listing ([66 FR 17659](#)).
- ❖ March 2006 – NMFS publishes “The 2002 U.S. West Coast Upper Continental Slope Trawl Survey of Groundfish Resources off Washington, Oregon, and California: Estimates of Distribution, Abundance, and Length Composition” ([NOAA Technical Memorandum NMFS-NWFSC-75](#)).
- ❖ 18 September 2006 – NMFS receives a petition from Mr. Sam Wright to list the Puget Sound DPSs of copper and quillback rockfish as “Endangered” or “Threatened” species.
- ❖ 23 January 2007 – NMFS finds that the 9/18/06 petition “does not present substantial scientific or commercial information indicating that the petitioned actions may be warranted” ([72 FR 2863](#)).
- ❖ April 2007 – NMFS publishes “Conservation of North Pacific Rockfishes: Ecological Genetics and Stock Structure – Proceedings of the Workshop March 2–3, 2004 Seattle, Washington” ([NOAA Technical Memorandum NMFS-NWFSC-80](#)).
- ❖ 9 April 2007 – NMFS receives petition from Mr. Sam Wright to list the DPSs of bocaccio, canary rockfish, yelloweye rockfish, greenstripe rockfish, and redstripe rockfish in Puget Sound as “Endangered” or “Threatened” under the ESA.
- ❖ 5 October 2007 – NMFS finds that the 9 April 2007 petition does not present substantial information needed to warrant the petitioned actions ([72 FR 56986](#)).
- ❖ 29 October 2007 – NMFS receives new information and a request to reconsider the 9 April 2007 rockfish petition.
- ❖ 17 March 2008 – NMFS considers the new information as a new petition that provides substantial information indicating that the petitioned actions may be warranted. NMFS initiates a status review and solicits information ([73 FR 14195](#)).
- ❖ 2 December 2008 – NMFS releases “Preliminary Scientific Conclusions of the Review of the Status of 5 Species of Rockfish: Bocaccio (*Sebastes paucispinis*), Canary Rockfish (*Sebastes pinniger*), Yelloweye Rockfish (*Sebastes ruberrimus*), Greenstripe Rockfish (*Sebastes elongatus*) and Redstripe Rockfish (*Sebastes proriger*) in Puget Sound, Washington.”
- ❖ 23 April 2009 – NMFS proposes bocaccio for “Endangered” species status, canary and yelloweye rockfish for “Threatened” species status, and greenstripe and redstripe rockfish as “not warranted” for ESA listing ([74 FR 18516](#)).
- ❖ **28 April 2010 – NMFS lists bocaccio as “Endangered” and canary rockfish and yelloweye rockfish as “Threatened.” Effective date is 27 July 2010.**

Sturgeon, Green

Green sturgeon are large (up to 7 feet and 350 pounds), long-lived, late maturing (15 years) anadromous fish that range from Queen Charlotte Sound (Canada) to central California (US). Two DPSs have been identified for the green sturgeon – northern and southern. The Eel River, in northern California, demarcates the spawning ranges for the two DPSs; and after spawning, green sturgeon from both DPSs intermingle throughout their entire range. The northern DPS of green sturgeon spawns mostly in the Klamath and Rogue Rivers and is ESA listed as a “species of concern.” The southern DPS of green sturgeon spawns in the Sacramento River and is ESA listed as “Threatened” with designated critical habitat from California to Washington.

Green sturgeon timeline

- ❖ 12 June 2001 – NMFS receives petition from three organizations to ESA list the North American green sturgeon as “Threatened” or “Endangered” and delineate critical habitat.
- ❖ 14 December 2001 – NMFS finds that substantial scientific information exists indicating that petition action may be warranted. NMFS initiates a status review and solicits information ([66 FR 64793](#)).
- ❖ June 2002 – NMFS releases “[Status Review for North American Green Sturgeon, *Acipenser medirostris*](#).”
- ❖ 29 January 2003 – NMFS determined that the green sturgeon is comprised of two DPSs (northern and southern), and neither warrants listing as a “Threatened” or “Endangered” species. Due to “remaining uncertainties about their population structure and status”, NMFS is “adding both DPSs to the agency’s list of candidate species and will reevaluate their status in 5 years provided sufficient new information becomes available indicating that a status review update is warranted” ([68 FR 4433](#)).
- ❖ 7 April 2003 - The Environmental Protection Information Center (and other Plaintiffs) challenged NMFS’s not warranted finding in US District Court.
- ❖ 2 March 2004 – A US District Court sets aside the NMFS green sturgeon finding and remanded the matter back to NMFS for reconsideration.
- ❖ 18 June 2004 – NMFS reconvenes its Biological Review Team and solicits information to update the green sturgeon status report ([69 FR 34135](#)).
- ❖ April 2005 – NMFS releases “[Green Sturgeon \(*Acipenser medirostris*\) Status Review Update](#).”
- ❖ 6 April 2005 – NMFS proposes listing the southern DPS of green sturgeon as “Threatened”. The northern DPS of green sturgeon will be maintained on the Species of Concern List, and its status will be reexamined in five years ([70 FR 17386](#)).
- ❖ 6 July 2005 – NMFS extends comment period for proposed listing of the southern DPS of green sturgeon ([70 FR 38861](#)).
- ❖ **7 April 2006 – NMFS lists the southern DPS of green sturgeon as “Threatened”** ([71 FR 17757](#)).
- ❖ 4 April 2007 – USFWS adds the southern DPS of green sturgeon to the List of Endangered and Threatened Wildlife ([72 FR 16284](#)).
- ❖ 8 September 2008 – NMFS proposes critical habitat for southern DPS of green sturgeon ([73 FR 52084](#)).
- ❖ 7 October 2008 – For the critical habitat proposed rule, NMFS corrects a map to match the text description and schedules a public hearing ([73 FR 58527](#)).
- ❖ 21 May 2009 – NMFS proposes ESA 4(d) rule representing the regulations deemed necessary and advisable for the conservation of southern DPS of green sturgeon ([74 FR 23822](#)).
- ❖ 9 October 2009 – NMFS designates critical habitat for southern DPS of green sturgeon ([74 FR 52300](#)).
- ❖ 12 November 2009 – NMFS announces its intent to develop a recovery plan for the southern DPS of green sturgeon ([74 FR 58245](#)).

Walleye Pollock

The walleye pollock is a member of the cod family and is considered one of the most vital commercial fisheries. Spawning populations of walleye pollock range from the Sea of Japan to the Puget Sound. The Puget Sound population is considered the southern extent of the Lower Boreal Eastern Pacific DPS of walleye pollock. The walleye pollock is federally listed as a “species of concern” and state-listed as a “candidate.”

Walleye Pollock timeline

- ❖ 8 February 1999 – NMFS is petitioned by Mr. Sam Wright to list and designate critical habitat for eighteen marine fish, including walleye pollock.
- ❖ 21 June 1999 – NMFS determines that seven species, including walleye pollock, present substantial information that may warrant listing ([64 FR 33037](#)).
- ❖ November 2000 – NMFS publishes “Status Review of Pacific Hake, Pacific Cod, and Walleye Pollock from Puget Sound, Washington” ([NOAA Technical Memorandum NMFS-NWFSC-44](#)).
- ❖ 24 November 2000 – NMFS publishes finding that Puget Sound populations of walleye pollock are part of a larger DPS that does “not warrant” ESA listing ([65 FR 70514](#)).

OTHER SPECIES

Columbia Springsnail

Springsnails range throughout the western United States. Springsnails are a tiny, whorled-shaped snail that lives near springs and river banks and can tolerate high salinity. Four species (Columbia, Harney Lake, Idaho, and Jackson Lake) were identified until 2006 when USFWS combined them into one species, Jackson Lake springsnail, whose listing was considered “not warranted.”

Columbia springsnail timeline

- ❖ 5 August 2004 – USFWS receives a petition to list the Columbia springsnail.
- ❖ 20 April 2005 – USFWS finds that the petition presents substantial information for listing the Columbia springsnail and initiates a status review ([70 FR 20512](#)).
- ❖ 28 September 2006 – USFWS combines the Columbia springsnail with three other previously distinct species as the Jackson Lake springsnail. Listing is considered “not warranted” ([71 FR 56838](#)).

Killer Whales (Orca)

Killer whales in the eastern North Pacific are classified into three ecotypes: resident, transients, and offshore. The resident ecotype is broken into five DPSs: Southern, Northern, Southern Alaska, Western Alaska, and Western North Pacific Resident. The southern resident DPS of killer whale is composed of three resident pods (J, K, and L), reside most of the year in Puget Sound, and is ESA-listed as “Endangered.” On 29 July 2009, NMFS proposes rules to protect critical habitat of killer whales by various means.

Killer Whale (Orca) timeline

- ❖ 2 May 2001 – The Center of Biological Diversity and 11 co-petitioners petition NMFS to list the southern resident killer whales as “Threatened” or “Endangered” and to designate critical habitat under the ESA.
- ❖ 13 August 2001 – NMFS finds that the petition presents substantial scientific information for listing southern resident killer whales, requests information, and initiates status review ([66 FR 42499](#)).
- ❖ 1 July 2002 – NMFS finds that listing of the southern resident killer whale is “not warranted” because it does not constitute a species, subspecies, or DPS ([67 FR 44134](#)).

- ❖ December 2002 – NMFS publishes “Status Review of Southern Resident Killer Whales (*Orcinus orca*) under the Endangered Species Act” ([NOAA Technical Memorandum NMFS-NWFSC-54](#)).
- ❖ 30 January 2003 – NMFS proposes designating the southern resident stock of killer whales as depleted under the Marine Mammal Protection Act ([68 FR 4747](#)).
- ❖ 29 May 2003 – NMFS declares the southern resident stock of killer whales as depleted under the Marine Mammal Protection Act ([68 FR 31980](#)).
- ❖ 17 December 2003 – The US District Court for the Western District of Washington sets aside NMFS’s “not warranted” ESA listing decision and remands the matter back to NMFS.
- ❖ 2 March 2004 – NMFS reconvenes its Biological Review Team to update the status review and request information. Under court order, NMFS must determine the ESA status of southern resident killer whales by December 17, 2004 ([69 FR 9809](#)).
- ❖ December 2004 – NMFS publishes “2004 Status Review of Southern Resident Killer Whales (*Orcinus orca*) under the Endangered Species Act” ([NOAA Technical Memorandum NMFS-NWFSC-62](#)).
- ❖ 22 December 2004 – NMFS recognizes the southern resident killer whales as a DPS and proposes their listing as “Threatened” ([69 FR 76673](#)).
- ❖ 3 October 2005 – NMFS releases the proposed conservation plan for southern resident DPS of killer whales to the public and requests comments ([70 FR 57565](#)).
- ❖ **18 November 2005 – NMFS lists the southern resident DPS of killer whale as “Endangered.”** The proposed rule was for “Threatened” status, but that was changed after reconsideration of data and public comments ([70 FR 69903](#)).
- ❖ 21 December 2005 – NOAA requests information and comments for a southern resident DPS of killer whale watching industry socioeconomic study ([70 FR 75792](#)).
- ❖ 15 June 2006 – NMFS proposes critical habitat for the southern resident DPS of killer whale ([71 FR 34571](#)).
- ❖ 29 November 2006 – NMFS designates critical habitat for southern resident DPS of killer whale ([71 FR 69054](#)). NMFS releases the proposed Recovery Plan for the southern resident DPS of killer whales to the public and requests comments ([71 FR 69101](#)).
- ❖ 22 Mar 2007 – NMFS provides advanced notice of proposed rulemaking concerning vessel effects upon the southern resident killer whale population ([72 FR 13464](#)).
- ❖ 4 April 2007 – USFWS adds the southern resident DPS of killer whale to the List of Endangered and Threatened Wildlife ([72 FR 16284](#)).
- ❖ 24 January 2008 – NMFS adopts the “Final Recovery Plan for Southern Resident Killer Whales” ([73 FR 4176](#)).
- ❖ February 2008 – NMFS publishes “Sound Exposure and Southern Resident Killer Whales (*Orcinus orca*): A Review of Current Knowledge and Data Gaps” ([NOAA Technical Memorandum NMFS-NWFSC-89](#)).
- ❖ 29 July 2009 – NMFS proposes regulations prohibiting vessels from approaching orcas closer than 200 yards and entering a conservation area during defined season (certain vessels would be exempt) ([74 FR 37674](#)).
- ❖ 6 April 2010 – NMFS initiates 5-year status review of southern resident DPS of killer whale ([75 FR 17377](#))

Marbled Murrelet

The Marbled Murrelet ranges from western Alaska and the Aleutian Islands to central California, and are ESA listed as “Threatened” in WA, OR, and CA. Except for some Alaskan populations, marbled murrelets nest in old growth located within 50 or more miles of the coastline. When at sea, marbled murrelets are usually found within a few kilometers of the shore, thus make them susceptible to sport and commercial fishing operations. In 2001, WDFW was issued a biological opinion in accordance with Section 7 of the ESA for an all-citizen Puget Sound Area commercial and recreational salmon fishery.

This Biological Opinion was just renewed through 2015, in coordination with the Puget Sound Chinook and Steelhead Harvest plans recently submitted to NMFS. Annual reports are submitted yearly.

Marbled murrelet timeline

- ❖ 15 January 1988 – USFWS receives a petition to list the marbled murrelet as “Threatened” throughout WA, OR, and CA.
- ❖ 17 October 1988 – USFWS finds that the petition presents substantial information for listing the marbled murrelet and initiates status review ([53 FR 40479](#)).
- ❖ 20 June 1991 – USFWS proposes listing the marbled murrelet as “Threatened” in WA, OR, and CA ([56 FR 28362](#)).
- ❖ **1 October 1992 – USFWS lists the marbled murrelet as “Threatened” in WA, OR, and CA** ([57 FR 45328](#)).
- ❖ 27 January 1994 – USFWS proposes a rule for critical habitat designation of the marbled murrelet ([59 FR 3811](#)).
- ❖ 10 August 1995 – USFWS proposes a supplemental rule amending the proposed critical habitat designation for the marbled murrelet ([60 FR 40892](#)).
- ❖ 24 May 1996 – USFWS publishes final rule designating critical habitat for the marbled murrelet in WA, OR, and CA ([61 FR 26252](#)).
- ❖ 24 September 1997 – USFWS releases “[Recovery Plan for the Threatened Marbled Murrelet \(*Brachyramphus marmoratus*\) in Washington, Oregon, and California.](#)”
- ❖ 21 April 2003 – USFWS announcement of initiation of 5-year status review for the marbled murrelet ([68 FR 19569](#)).
- ❖ 1 September 2004 – USFWS releases [5-year status report](#) for the marbled murrelet.
- ❖ 12 September 2006 – USFWS publishes a proposed rule designating a 94% reduction in critical habitat for marbled murrelets in WA, OR, and CA ([71 FR 53838](#)).
- ❖ 6 March 2008 – USFWS rejects proposed rule and keeps marbled murrelet designated critical habitat from 24 May 1996 final rule ([73 FR 12067](#)).
- ❖ 28 May 2008 – USFWS receive a petition from the American Forest Resource Council, the Carpenters Industrial Council of Douglas County, OR; and Ron Stuntzner requesting the delisting of the marbled murrelet.
- ❖ 31 July 2008 – USFWS publishes a proposed rule designating a 1% reduction in critical habitat for marbled murrelets in WA, OR, and CA ([73 FR 44678](#)).
- ❖ 2 October 2008 – USFWS finds that the petition presents substantial information for delisting the marbled murrelet. USFWS initiates a status review, which will serve as the 5-year status review ([73 FR 57314](#)).
- ❖ 11 February 2009 – USFWS reopens comment period for proposed critical habitat rule ([74 FR 6852](#)).
- ❖ 12 June 2009 – USFWS releases “[Marbled Murrelet \(*Brachyramphus marmoratus*\) 5-Year Review](#)”
- ❖ 21 January 2010 – USFWS determines that a petition to delist the Marbled Murrelet is not warranted. USFWS confirms that the Washington/Oregon/California population is a valid DPS, is subject to many threats, and should continue to be listed as a “Threatened” species ([75 FR 3424](#)).

Questions regarding this bulletin may be directed to Mitch Dennis in the Fish Program ESA Response Unit (360) 902-2654. Questions regarding species status review details and recovery planning status can be directed to the following species program managers within WDFW's Fish Program:

Salmon –	Jeff Haymes	(360) 902-2727
Steelhead –	Bob Leland	(360) 902-2817
Bull Trout, Cutthroat, Kokanee –	Jim Uehara	(360) 902-2738
Puget Sound Marine Fish, Eulachon –	Greg Bargmann	(360) 902-2825
Sturgeon –	Olaf Langness	(360) 906-6741
Marbled Murrelet –	Eric Cummins	(360) 902-2698
Killer Whale –	Steve Jeffries	(253) 589-7235
	or	
	Gary Wiles	(360) 902-2692

Table 3. Federally ESA listing status for fish species for Washington state.

Family	Species	DPS / ESU	Status	As of	Critical Habitat Designated ¹	4(d) Protective Regulations ¹	Puget Sound	Washington Coast	Lower Columbia River	Middle Columbia River	Upper Columbia River	Snake River Basin
<i>Acipeneridae</i>	<i>Green Sturgeon</i>	Northern DPS	Species of concern	15-Apr-04	-	-	X	X	X			
		<i>Southern DPS</i>	<i>Threatened</i>	<i>6-Apr-05</i>	X	I	X	X	X			
Clupeidae	Pacific Herring	Cherry Point subpopulation	Not warranted	1-Jun-05	-	-	X	X				
		Georgia Basin DPS	Not warranted	1-Jun-05	-	-	X	X				
Gadidae	Pacific Cod	Pacific Cod DPS	Not warranted	24-Nov-00	-	-	X	X				
	Pacific Hake	Georgia Basin DPS	Species of concern	24-Nov-00	-	-	X	X				
	Walleye Pollack	Lower Boreal Pacific DPS	Not warranted	24-Nov-00	-	-	X	X				
<i>Osmeridae</i>	<i>Eulachon</i>	<i>Southern DPS</i>	<i>Threatened</i>	<i>17-May-10</i>	I	I	X	X	X			
Petromyzontidae	Pacific Lamprey	-	Not warranted	27-Dec-04	-	-	X	X	X	X	X	X
	River Lamprey	-	Not warranted	27-Dec-04	-	-	X	X	X	X	X	X
	Western Brook Lamprey	-	Not warranted	27-Dec-04	-	-	X	X	X	X	X	X
<i>Bull Trout</i>	<i>Columbia River DPS</i>	<i>Threatened</i>	<i>10-Jul-98</i>	X	X			X	X	X	X	
	<i>Puget Sound / Coastal DPS</i>	<i>Threatened</i>	<i>1-Dec-99</i>	X	X	X	X					
Cutthroat Trout (Coastal)	Puget Sound / Strait of Georgia DPS	Not warranted	5-Apr-99	-	-	X						
	Olympic Peninsula DPS	Not warranted	5-Apr-99	-	-	X						
	SW Washington / Lower Columbia River DPS	Not warranted	25-Feb-10	-	-	X	X					
Cutthroat Trout (Westslope)	-	Not warranted	14-Apr-00	-	-					X	X	
	<i>Lower Columbia River ESU</i>	<i>Threatened</i>	<i>24-Mar-99</i>	X	X			X				
	Middle Columbia River Spring-run ESU	Not warranted	9-Mar-98	-	-				X			
<i>Chinook Salmon</i>	<i>Puget Sound ESU</i>	<i>Threatened</i>	<i>24-Mar-99</i>	X	X	X						
	<i>Snake River Fall-run ESU</i>	<i>Threatened</i>	<i>22-Apr-92</i>	X	X						X	
	<i>Snake River Spring/Summer-run ESU</i>	<i>Threatened</i>	<i>22-Apr-92</i>	X	X						X	
	<i>Upper Columbia River Spring-run ESU</i>	<i>Endangered</i>	<i>22-Apr-99</i>	X	X						X	
	Upper Columbia River Summer/Fall-run ESU	Not warranted	9-Mar-98	-	-						X	
	Washington Coast ESU	Not warranted	9-Mar-98	-	-	X						
	<i>Columbia River ESU</i>	<i>Threatened</i>	<i>25-Mar-99</i>	X	X			X	X			
<i>Chum Salmon</i>	<i>Hood Canal Summer-run ESU</i>	<i>Threatened</i>	<i>25-Mar-99</i>	X	X	X						
	Pacific Coast ESU	Not warranted	10-Mar-98	-	-	X						
	Puget Sound / Strait of Georgia ESU	Not warranted	10-Mar-98	-	-	X						
<i>Salmonidae</i>	<i>Lower Columbia River ESU</i>	<i>Threatened</i>	<i>28-Jun-05</i>	I	X			X				
	Olympic Peninsula ESU	Not warranted	25-Jul-95	-	-	X						
	Puget Sound / Strait of Georgia ESU	Species of concern	15-Apr-04	-	-	X	X					
	Southwest Washington ESU	Undetermined	-	-	-	X	X					
	Kokanee	Lake Sammamish DPS	Candidate	6-May-08	-	-	X					
Pink Salmon	Even-year ESU	Not warranted	4-Oct-95	-	-	X						
	Odd-year ESU	Not warranted	4-Oct-95	-	-	X						
<i>Sockeye Salmon</i>	Baker River ESU	Not warranted	25-Mar-99	-	-	X						
	Lake Pleasant ESU	Not warranted	10-Mar-98	-	-	X						
	Lake Wenatchee ESU	Not warranted	10-Mar-98	-	-					X		
	Okanogan River ESU	Not warranted	10-Mar-98	-	-					X		
	<i>Ozette Lake ESU</i>	<i>Threatened</i>	<i>25-Mar-99</i>	X	X	X						
	Quinault Lake ESU	Not warranted	10-Mar-98	-	-	X						
	<i>Snake River ESU</i>	<i>Endangered</i>	<i>20-Nov-91</i>	X	X						X	
<i>Steelhead</i>	<i>Lower Columbia River DPS</i>	<i>Threatened</i>	<i>19-Mar-98</i>	X	X			X				
	<i>Middle Columbia River DPS</i>	<i>Threatened</i>	<i>19-Mar-98</i>	X	X	X			X	X		
	Olympic Peninsula DPS	Not warranted	9-Aug-96	-	-	X						
	<i>Puget Sound DPS</i>	<i>Threatened</i>	<i>11-Jun-07</i>	I	X	X						
	<i>Snake River Basin DPS</i>	<i>Threatened</i>	<i>18-Aug-97</i>	X	X						X	
	Southwest Washington DPS	Not warranted	9-Aug-96	-	-	X	X					
	<i>Upper Columbia River DPS</i>	<i>Threatened</i>	<i>24-Aug-09</i>	X	X	X					X	
<i>Scorpaenidae</i>	Black Rockfish	Puget Sound population	Not warranted	21-Jun-99	-	-	X	X				
	Blue Rockfish	Puget Sound population	Not warranted	21-Jun-99	-	-	X	X				
	<i>Bocaccio</i>	<i>Georgia Basin DPS</i>	<i>Endangered</i>	<i>27-Jul-10</i>	I	I	X					
	Brown Rockfish	Puget Sound population	Not warranted	3-Apr-01	-	-	X	X				
	<i>Canary Rockfish</i>	<i>Georgia Basin DPS</i>	<i>Threatened</i>	<i>27-Jul-10</i>	I	I	X					
	China Rockfish	Puget Sound population	Not warranted	21-Jun-99	-	-	X	X				
	Copper Rockfish	Puget Sound population	Not warranted	3-Apr-01	-	-	X	X				
	Greenstripe Rockfish	Puget Sound DPS	Not warranted	23-Apr-09	-	-	X					
	Quillback Rockfish	Puget Sound population	Not warranted	3-Apr-01	-	-	X	X				
	Redstripe Rockfish	Puget Sound DPS	Not warranted	23-Apr-09	-	-	X					
	Tiger Rockfish	Puget Sound population	Not warranted	21-Jun-99	-	-	X	X				
	Widow Rockfish	Puget Sound population	Not warranted	21-Jun-99	-	-	X	X				
	<i>Yelloweye Rockfish</i>	<i>Georgia Basin DPS</i>	<i>Threatened</i>	<i>27-Jul-10</i>	I	I	X					
	Yellowtail Rockfish	Puget Sound population	Not warranted	21-Jun-99	-	-	X	X				

¹ "-" - No designation; "I" - Designation in progress; "X" - Designation finalized

Table 5. ESA threatened species take on associated 2009 4(d) research and monitoring permits descriptions.

Permit #	Researcher	Project Title	Site / Region
14656	Mitch Dennis	Marine Juvenile Salmon Investigations	Hood Canal, Puget Sound; PS / 4, 6
14696	Julie Henning	Cowlitz River Fall Chinook Wild Stock Tagging	Cowlitz River; LCR / 5
14714	Kenneth Ostrand	Natural Reproductive Success and Demographic Effects of Hatchery-Origin Steelhead in Abernathy Creek, Washington	Abernathy Creek; LCR / 5
14715	Anne Shaffer	Elwha Nearshore Restoration and Salmon Recovery	Elwha River; Strait of Juan de Fuca / 6
14722	Stephen Quinnell	Puget Sound Ambient Monitoring Program - Groundfish Survey	Puget Sound; PS / 4, 6
14742	Todd Hillson	Grays River Juvenile Salmonid Monitoring	Grays River; LCR / 5
14766	David Pflug	Saltonstall-Kennedy Grant Research – Impacts of hatchery steelhead smolt release levels on wild and hatchery steelhead survival rates	Skagit & Sauk rivers; PS / 4
14768	Darcy Wildermuth	Green River Wild Steelhead Scale Collections and Spawning Surveys	Green River; PS / 4
14774	Bryce Glaser	Coweeman River Juvenile Migrant Trapping	Coweeman River; LCR / 5
14775	Bryce Glaser	Wind River Juvenile Migrant Trapping	Wind River; MCR / 5
14776	Bryce Glaser	Lower Columbia River Adult Salmonid Monitoring and Stock Assessment	Washougal, Lewis, Toutle, & Wind Rivers; LCR, MCR / 5
14777	Bryce Glaser	Lower Columbia River Stock Assessment	Lwr Columbia River tributaries; LCR / 5
14783	Jennifer Scott	Biological Monitoring and Evaluating for Yakima Tributary Access and Habitat Program (YTAHP)	Yakima and Naches R & tribs; MCR / 3
14786	Mike Scharpf	Carbon River Steelhead DNA Baseline	Carbon River, PS / 6
14804	Andy Wones	Smith Island Dike Breaching and Habitat Restoration Project Monitoring	Union Slough; PS / 4
14811	Glen Mendel	Stock Assessment - SE Washington	Snake River Basin; SR / 1
14817	Josua Holowatz	Cedar Creek Juvenile Trapping Using Screw Trap	Cedar Creek; LCR / 5
14838	Shane Hawkins	Lewis River Wild Fall Chinook CWT Project	Lewis River; LCR / 5
14844	Julie Grobelny	Salmon Creek salmonid evaluation	Salmon Creek; LCR / 5
14861	Howard Schaller	Monitor Use of the Mainstem Columbia River (and Lower Walla Walla River) by Bull Trout from the Walla Walla Sub-basin	Columbia & Walla Walla River; MCR / 1, 3
14866	Kenneth Lujan	National Wild Fish Health Survey	Klickitat River; MCR / 3, 5
14870	Mara Zimmerman	Big Beef Creek Adult Escapement Study – 2010	Big Beef Cr., Hood Canal; PS / 6
14871	Mara Zimmerman	Hood Canal Coho & Steelhead Parr Density & Over-Winter Survival Study 2010	Hood Canal; PS / 6
14874	Mara Zimmerman	Skagit River downstream-migrant salmon evaluation 2010	Skagit River; PS / 4
14878	Mara Zimmerman	Nisqually River juvenile monitoring 2010	Nisqually River; PS / 4
14880	Brett Barkdull	Scale Sampling of steelhead via hook and line in the Skagit, Samish and Nooksack River Basins	Skagit, Samish, & Nooksack rivers; PS / 4
14881	Mara Zimmerman	Green River juvenile monitoring 2010	Green River; PS / 4
14884	Mara Zimmerman	Dungeness River juvenile migration study 2010	Dungeness & Deschutes rivers; PS / 6
14893	Michael Gallinat	Smolt trap on Touchet River	Touchet River; MCR / 1
14905	Josua Holowatz	Cedar Creek Adult Fishway Salmonid Trapping	Cedar Creek; LCR / 5

Table 5. Continued

Permit #	Researcher	Project Title	Site / Region
14907	Mara Zimmerman	Duckabush Juvenile Salmon Abundance Study 2010	Duckabush River; PS / 6
14908	Mara Zimmerman	Lower Columbia IMW downstream-migrant trapping 2010	Abernathy, Germany, & Mill creeks; LCR / 5
14909	Mara Zimmerman	Abernathy Creek Upstream Migrant Evaluation - 2010	Abernathy Creek; LCR / 5
14925	Joe Zendt	YKFP Klickitat Monitoring and Evaluation Project	Klickitat River; MCR / 3, 5
14930	Sarah Woehrman	Cornet Bay Restoration Project Fish use Survey	Whidbey Island; PS / 4
14973	Mara Zimmerman	Lake Washington tributary downstream-migrant salmon evaluation 2010	Lake Washington; PS / 4
14982	Mara Zimmerman	Lower Columbia River Coho Parr Abundance & Over-winter Survival Study 2010	Abernathy, Germany, & Mill creeks; LCR / 5
14989	Charles Morrill	Cowlitz Falls Anadromous Fish Reintroduction Program: Cowlitz Fall Dam Guidance Improvements and Upper Cowlitz Ecosystem Studies	Cowlitz River; LCR / 5
14999	Peter Verhey	Snohomish And Stillaguamish Watersheds Annual Salmonid Biological Sampling	Snohomish & Stillaguamish watersheds; PS / 4
15008	Paul Hoffarth	WDFW District 4 Surveys for Presence and Abundance of Anadromous and Resident Fish Species in Tributaries and Irrigation Wasteways of the Mid-Columbia, Lower Snake, and Yakima Rivers	Lower Snake; SR / 1; Middle Columbia & Yakima rivers; MCR / 3
15011	Brian Perleberg	Annual Small Stream Fish Presence / Absence Survey	LCR, Cowlitz River tributaries; LCR / 5
15012	Julie Henning	Cowlitz River Steelhead Genetics	Cowlitz River; LCR / 5
15071	Kent Mayer	Asotin Creek Salmon Population Assessment	Asotin Creek; SR / 1
15076	Mara Zimmerman	Hood Canal IMW steelhead juvenile study	Big Beef, Little Anderson, Seabeck, & Stavis creeks; PS / 6
15080	Thom Johnson	Salmon Creek summer chum outmigrant trapping and summer chum upstream and downstream trapping	Salmon & Snow creeks; Strait of Juan de Fuca / 6
15081	Marla Steinhoff	Pilot Study for Lower Duwamish Waterway Baseline Tissue Monitoring Program, Phase 2	Duwamish River; PS / 4
15082	Mara Zimmerman	Hamma Hamma Screw Trap 2010	Hamma Hamma River; PS / 6
15083	Howard Schaller	Coastal Cutthroat Trout Distribution, Abundance and Habitat in the Lower Columbia River Basin (Washington)	Lwr Columbia River tributaries; LCR / 5
15087	Howard Schaller	Lewis River Bull Trout Distribution Assessment	Lewis River; LCR / 5
15089	Bob Vadas	Aquatic-monitoring Projects to Assess Flow-restoration Impacts on Fish Density and Assemblage and Age-class Structure	Okanogan River; UCR / 2; Yakima River; MCR / 3; Nooksack River; PS / 4; Wind River; MCR / 5; Kitsap Peninsula; PS / 6
15097	Doris Small	Hood Canal Habitat Restoration Project Monitoring	Port Townsend Bay, Hood Canal; PS / 6
15098	Doris Small	Life History and Ecology of Salmonids along the shoreline of Kitsap Peninsula	Kitsap Peninsula, Puget Sound; PS / 6
15099	Glen Mendel	Assess Salmonids and their Habitat Conditions in the Walla Walla Basin in WA	Walla Walla River Basin; MCR / 1
15173	Brien Rose	Distribution, abundance, and habitat characterization of juvenile lampreys in Herman Creek, Oregon	Gibbons Creek; LCR / 5
15288	Pete Hahn	Puget Sound Chinook abundance estimates via mark-recapture and redd surveys	Green, Snohomish, & Stillaguamish rivers; PS / 4
15426	Julie Henning	Cowlitz River Cutthroat Predation Study	Cowlitz River; LCR / 5

Table 6. Section 10 permits held by WA Department of Fish and Wildlife.

Permit #	Status	Date Issued	Expiration Date	Project Title	Contact	Agency
1114	Active	9-Apr-1998	31-Aug-2012	Juvenile, endangered, naturally produced and artificially propagated, upper Columbia River steelhead take associated with a smolt monitoring program at Rock Island Dam on the Columbia River	Mike Tonseth	WDFW
1196	Active	20-Jan-2004	20-Jan-2014	Artificial propagation programs designed to supplement natural spawning populations in the Wenatchee River and Methow River basins.	Mike Tonseth	WDFW
1345	Active	23-Feb-2002	31-Dec-2011	Warmwater Fish Species Population Monitoring; Monitoring and Evaluation of Fish Predation on Listed Juvenile Chinook Salmon in the Lake Washington Basin	Mitch Dennis	WDFW
1347	Active	22-Oct-2003	22-Oct-2013	Incidental take of ESA-listed adult and juvenile salmonids associated with otherwise lawful artificial propagation programs for non-listed species in the upper Columbia River and its tributaries in the state of Washington	Mike Tonseth	WDFW
1395	Active	2-Oct-2003	2-Oct-2013	Artificial propagation programs for the enhancement of listed upper Columbia River steelhead	Mike Tonseth	WDFW
1530	Active	1-Mar-2006	31-Dec-2010	Operation of the Adult Fish Trap at Lower Granite Dam, WA	Mark Schuck	WDFW
1554	Active	20-Jun-2008	20-Jun-2018	Recreational Fisheries for Unlisted Species in the Middle and Upper Columbia River and its Tributaries	Mike Tonseth	WDFW
1592	Active	13-Apr-2007	31-May-2010	Upper Columbia River Spring Chinook Salmon White River Supplementation Program	Mike Tonseth	WDFW
13537	Active	23-Sep-2008	31-Dec-2017	Gray's River Weir	Bryce Glaser	WDFW
14433	Active	22-June-2009	22-June-2019	Operation and maintenance of Sunset Falls Trap and Haul Fishway Program to allow South Fork Skykomish Chinook Salmon and South Fork Skykomish Steelhead to spawn naturally in habitat upstream of the falls	Tom Burns	WDFW

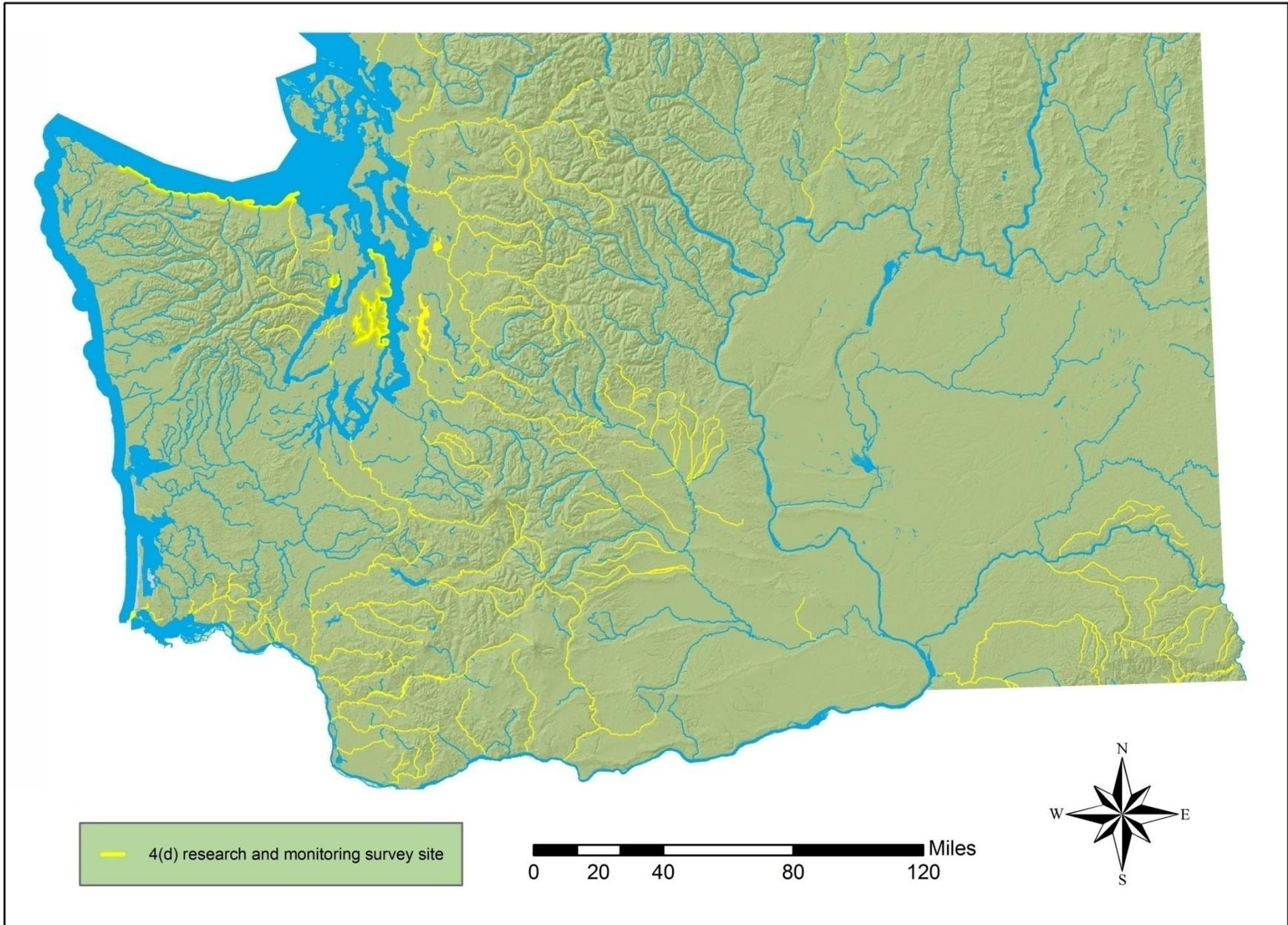


Figure 1. Locations of 2010 4(d) permit scientific research and monitoring sites in Washington state.